

Vol 8 The War Illustrated n° 190

Edited by Sir John Hammerton

SIXPENCE

SEPTEMBER 29, 1944



IN LIBERATED PARIS tanks of the 2nd French Armoured Division presented an impressive spectacle as they passed the Arc de Triomphe. On August 25, 1944, the German General von Choltitz had surrendered the capital to General Leclerc after 50,000 members of the French Forces of the Interior and unarmed patriots had risen against the enemy. Garrison and some 18,000 Germans had been made prisoners in the city. See also Illus. pages 303-308.

Photo, Planet News

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Afloat and Ashore with Our Roving Camera



MOTOR-TORPEDO-BOATS are the fighting midges of the Royal Navy; officially, they are part of our Light Coastal Forces. Of these little ships which dash and scurry over the wild waters of the Channel searching for enemy targets, the Fairmile (above) is typical. It is 115 feet in length, with a complement of 30 ratings and 3 officers. Armament includes two 21-in. torpedoes, and pom-pom and Oerlikon guns.

MOBILE X-RAY VANS (left) call at British factories to look into the health of war-workers. X-ray photographs, which have been taken by the thousand, reveal the internal condition of those who sit for their "portraits," and according to the findings of the experts so is the medical treatment. Each unit consists of radiologist, three radiographers, doctor, marshal, three clerks and the van driver.

AERIAL LIGHTHOUSE KEEPER is one of the wartime positions so capably filled by W.A.A.F.s. After intensive training, the girls "man" and maintain these lighthouses which are so valuable a part of the night-flying equipment of R.A.F. bomber stations. Attending to her specialized job, the 28-year-old W.A.A.F. on the right was in peacetime a clerk in a draughtsman's office.



RUSSIAN OFFICERS IN NORMANDY, on a recent visit to an R.A.F. airfield under the guidance of a British officer (pointing), included Vice-Adm. Kharlamov (head of the Soviet Military Mission in England), Maj.-Gen. Skliarov and Vasiliev, and Col. Gorbakov. Above, they are watching Typhoons.



STAPLE INN, historic 16th-century building in London's Holborn, was one of the Capital's show places badly damaged during the flying-bomb attacks. Rescue workers are seen (above) removing from the wreckage ancient relics and such other items as were worth the risk and trouble of salvaging.

THE BATTLE FRONTS

by Maj.-Gen. Sir Charles Gwynn, K.C.B., D.S.O.

So much has happened in the fortnight since I last wrote that if we were dealing with an enemy of normal mentality it would be safe to predict that the inevitable end would be reached in a few days. Rumania, Bulgaria and Finland have all accepted the situation and have followed the example of Italy—Rumania and Bulgaria to the full extent of changing sides. Hungary alone of the satellite countries remains in the enemy's camp, and even she would probably get out of it if she could, and if she were not so hostile to Rumania.

German mentality, and in particular Nazi mentality, being what it is, it would be rash to assume, however, that no further great exertion will be needed. I feel certain that the Reichswehr will not go down as in 1918 without a final battle when confronted with terms of unconditional surrender. Weak as the defences of the German western frontier now are through lack of adequate numbers of good troops to hold them, they nevertheless present a formidable obstacle which we cannot expect to break through without a bitter fight.

The momentum of the great pursuit through northern France can hardly be expected to carry us through such an obstacle without a pause to close up and re-group for a very different type of operations, and of course a pause gives the enemy time to reorganize and to some degree recover his morale. I have not the least doubt that the Siegfried Line will break under a fully organized attack, but there should be no disappointment if the attack takes longer to develop and to be carried through than the speed of the pursuit phase might lead us to expect.

There is always, however, the possibility that when the full extent of the disasters in France and Rumania and the strategic implications of the defection of the satellite nations are better known in Germany, there may be a complete breakdown of morale. There are indications that the Russians are now ready to renew on a major scale their offensive on the Vistula and against East Prussia. A break-through there would be even more decisive than in the west where the Rhine affords a second line of defence which has no counterpart in the eastern front.

FRANCE The amazing speed with which Montgomery's 21st Army Group took up the pursuit when it had dealt with the Falaise pocket and with the remnants of the 7th Army south of the Seine will, I hope, convince everyone of the absurdity of drawing critical comparisons between the rates of progress of armies operating in what is almost a military void and those encountering stiff resistance. In the one case, progress is in the main limited by the difficulty of maintaining supplies—that in itself alleviated by low expenditure of munitions—and in the other, progress is checked by projectiles and mines.

Conversely it may be noted how the most rapid pursuit when it has covered long distances can be checked, even by disorganized and largely demoralized armies who find a line on which they can stand and fight. We have seen this happen in Russia, in Italy and now again in France. What, I think, deserves our special admiration is the speed and energy with which the British 2nd Army and the Canadians took up the pursuit when they had crossed the Seine after fighting which must have caused a considerable amount of disorganization, exhaustion and great expenditure of munition supplies.

In their pursuit they had to cross river lines in their widest reaches and encounter enemy groups that, although in retreat, had not yet been engaged in battle. Furthermore, the Canadians especially had to deal, either by by-passing or by capture, with enemy garrisons left to deny us the use of the Channel ports. As a single feat the 2nd Army's final dash from Brussels which took the garrison of Antwerp by surprise and secured that great port practically intact perhaps deserves the greatest credit and achieved results of the highest importance.

The capture of Antwerp and the closing of the 15th German Army's line of retreat to the north is proof that the speed of the



Lieut.-Gen. SIR OLIVER LEES, commander of the 8th Army in Italy (left), explained the battle situation to Mr. Churchill—Gen. Alexander looking on—previous to watching an attack on a German-held ridge, after the Muro had been crossed, on August 26, 1944.
Photo, British Official

pursuit had a great strategic object and was not inspired merely by competitive ambitions.

ITALY The great and exciting events in the west should not distract our attention from the other battle fronts. In particular we should not under-estimate the part played by General Alexander's Army Group in Italy. It has had a long and difficult campaign, and by its unceasing pressure has forced the enemy to expend reserves he badly needed elsewhere. In particular we may well believe that General Patch's landing and rapid advance, including the capture of Toulon and Marseilles, could not have had such immediate success if German divisions had not been sent from France to reinforce Kesselring.

Now Kesselring himself is in a precarious position. His immensely strong Gothic Line has been broken and he will almost certainly be forced to undertake a long and difficult retreat. Alexander has again exploited the inherent advantages of the offensive—surprise and the concentration of force at the selected point—which when skilfully used will overcome the strongest defensive position. The general similarity between Alex-

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ander's methods against the Cassino Line and now against the Gothic Line, and Montgomery's methods in the Cherbourg peninsula is easily detected. Kesselring has proved himself to be a good and determined general, particularly by the way he rallied and reorganized his defeated armies, but his stand to cover the Lombardy Plain has weakened rather than strengthened the present German situation; for his army has become nearly as useless and wasteful a detachment as was the force left in the Crimea and as are the German armies in the Baltic States and northern Finland.

For that, the German Higher Command's strategy is responsible. German military historians will not be able this time to ascribe their defeat to the breakdown of the Home front, and they will have little cause to complain of the fighting qualities of their troops or the technical efficiency of the General Staff. It seems certain, therefore, that much will be written about the baleful influence Hitler has exercised on the higher direction of the war in order to protect the reputation for infallibility of the great General Staff. Hitler may be treated as a transient phenomenon, but the General Staff may emerge again.

If Hitler has been mainly responsible for German disasters, there can be little doubt that Russian recovery from disaster has been due to Marshal Stalin. But he also is mortal, and the interesting matter for speculation is whether he has created a machine that will long survive him. It would seem that he probably has, judging from the number of brilliant generals his regime has produced, and from the amazing efficiency with which the administrative part of the machine has worked. It is hard to believe that an organization built on such wide foundations could collapse rapidly.

RUSSIA Meanwhile, the question of the moment is when will the decisive encounter on the Russian front begin. Malinovsky and Tolbukhin have brilliantly carried out their part in the Rumanian campaign, but both in Rumania and in Finland the successful issue was due more to patient and farsighted diplomacy than to the purely military operations. It is on the Polish and East Russian fronts, where the main armies of both sides face each other, that the decisive military struggle must take place. Hard as the Germans have been fighting, the constant counter-attacks they have delivered can only have tended to exhaust their strength, and the issue when the final test comes cannot be in doubt.

FAR EAST With the German war approaching its end, it is perhaps insufficiently realized how much progress has been made in the war with Japan. Air and sea operations conducted against her have become almost as great a menace to her sea communications as the U-boat ever was to ours in the Atlantic.

Her main Fleet can no longer operate outside the range of shore-based fighter aircraft, and cannot prevent the steady advance of American naval and air bases towards Japan's home bases and towards her lines of sea communication. In Burma the Japanese attempt to invade India and to interrupt the construction of land communications with China have been decisively defeated, though at heavy cost to our own troops, whose operations under the most trying conditions have hardly been followed with the attention they deserve.

The Empire certainly has taken its full share in the land counter-offensive against Japan, including of course Australian operations in New Guinea. Moreover, that share is likely to increase when weather conditions permit of more extensive operations in Burma and as more shipping becomes available for amphibious enterprises.

When Allied Armies Reached the Siegfried Line



THE ALBERT CANAL, which runs from Antwerp to the Meuse, in Belgium, was crossed by British and Dutch troops against strong enemy resistance on September 7, 1944, when the first bridge-head was established at Beeringen. Blown up by the retreating Germans, the bridge (above, background) over the canal was restored by Royal Engineers: a British tank has just crossed it, whilst a Dutch soldier of the Princess Irene Regiment (right) and a British sergeant share guard duties at the approach of the bridge.



A MIGHTY ARC, 225 miles long, of Allied forces in France and Belgium threatened the German frontier defences: by September 15, 1944, the U.S. 1st Army had crossed the frontier and broken into the outposts of the Siegfried Line near Aachen; farther north, the British 2nd Army on the Escout Canal was within ten miles of the border; the U.S. 3rd Army driving on from Nancy had joined up with the 7th Army near Belfort. Arrows on map show directions of Allied thrusts on September 11. PAGE 292 Photo, British Official. Map by courtesy of *The Times*

The Gothic Line Breached on a 20-Mile Front



IN ITALY THE 8th ARMY opened an attack on the Gothic Line on August 26, 1944. By September 3 the defences had been breached from Pesaro in the Adriatic sector to a point 20 miles inland. British, Canadian, Indian, Italian and Polish troops took part; the Polish Corps was opposed by the same German forces—the 1st Parachute Division—against whom it had fought at Cassino. Poles handle a 3-in mortar in a farmyard (1). During the onslaught civilians sought safety in a tunnel (2). A British signaller operates his portable radio set on the road (3). British Infantry and Shermans on a captured hill position (4).

THE WAR AT SEA

by Francis E. McMurtie

IN announcing the formation of the Royal Naval Scientific Service, inaugurated on September 7, 1944, the Admiralty released some information concerning technical developments during the war. There was no scientific organization in the Navy before 1914-18, but during those years a large number of scientists were brought into the service from the universities and from industry. By 1939 these numbered about 600, a figure which has since been expanded by some 3,000 temporary entries. Hitherto they have been divided into scientific, technical and chemical pools, but have now been embodied in a single organization under the Director of Scientific Research.

Members of the R.N.S.S. will be on a similar footing to those of the Royal Corps

revolution in the equipment of warships. Working as it does in darkness and fog, radar has been of inestimable value to the Royal Navy. The uncanny way in which touch was maintained with the Scharnhorst off the North Cape in the darkness of an Arctic night is now explained.

WARTIME improvements in radio—now adopted as the official term for wireless, though its similarity to radar seems likely to lead to occasional confusion—have been almost as far-reaching. Communication can be maintained over greater distances, with less liability to interruption. Moreover, as proved during the Normandy campaign, it is now possible to keep open a great many lines of wireless communication at once.

principles in different ways; but our scientists were always ready to meet enemy ingenuity with an effective counter-measure. In fact, we have contrived to keep ahead of the Germans in every department whenever a novel sea weapon has been brought into use. In torpedoes we were superior to the enemy from the outset, the only enemy device which has given us any trouble being the German acoustic homing torpedo. In normal laboratory work the progress made in this war has been so great that it is now possible for two girls to carry out analyses of steel samples at the rate of a thousand a day, work which would have occupied about 500 people in the last war.

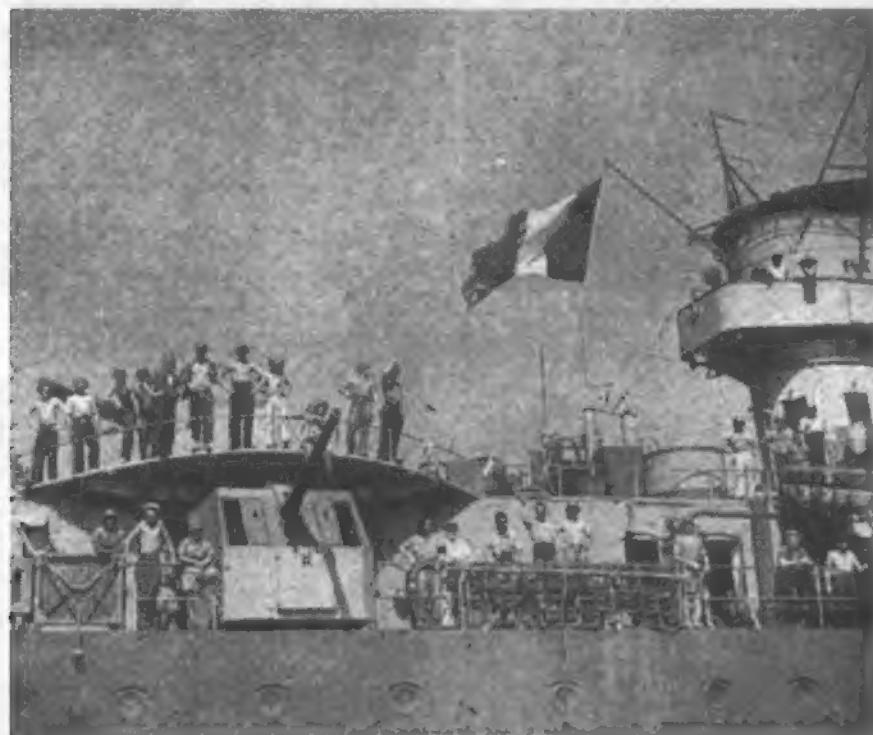
HOPEs that a large number of trawlers would be returned to their owners by the Admiralty, which took them over in 1939, were encouraged by the news that a couple were actually handed back recently. It is true, of course, that trawlers are unlikely to be wanted in large numbers for operations against the Japanese in the Far East. But it must not be forgotten that in European waters the Germans have laid immense numbers of mines which will require to be swept up as soon as hostilities cease. This work will fall largely upon the trawlers, since the majority of fleet minesweepers may be expected to go to the East next year. Thus the prospects of immediate release of trawlers for fishing can hardly be expected just yet.

GREATER Naval Activity Expected in North Sea

The two that are reported to have been returned, the Aquamarine and Onyx, are understood to be vessels over 30 years old, no longer so suitable as they were for naval purposes. It is possible, however, that most of the wooden drifters which were taken over by the Admiralty at the outbreak of war may become available to resume their work on the herring fisheries. There must be in existence considerably over a hundred of these useful vessels, which are of smaller size and lower engine power than the average trawler.

Now that the German Navy has been driven out of the Channel with heavy loss, it may be expected that there will be greater naval activity in the North Sea. For two or three years past there have been regular encounters there between our coastal craft (motor-torpedo-boats and motor-gunboats) and those of the enemy, in which the advantage has invariably lain with us. Of late, night engagements off the Hook of Holland and the Frisian Islands have been increasingly frequent.

BEFOR long the Germans will have to abandon Dutch harbours as they already have those of France and Belgium. No effort will be spared to harry enemy submarines and surface vessels as they retreat towards their own coast and ultimately to the Baltic. Not only our light coastal craft, but also cruisers and destroyers may be expected to take part in this work, as they already have done in the Channel. To oppose this weight of attack the Germans can have little left. Since D-Day they are believed to have lost eight destroyers or large torpedo boats in the Channel, some in action with our own destroyers and others as the result of attacks by Coastal Command. They may try to bring back from Norway the destroyers which were stationed there with a view to intercepting Allied convoys to and from the northern Russian ports. Some of these destroyers were hit and badly damaged during the concentrated attacks made by the Fleet Air Arm on the Tirpitz and other ships in Altenfjord in August 1944. It is not known to what extent the Tirpitz herself suffered on this occasion, as the ship was hidden by smoke screens which hindered effective reconnaissance from the air.



THE FRENCH CRUISER EMILE BERTIN, 5,886 tons, complement 567, took part in the Allied invasion of Southern France on August 15, 1944. From her decks, during a lull in the bombardment, eager eyes of the sailors are directed at the coastline of their native land so soon to be liberated completely from the dominance of the Hun.

of Naval Constructors, and will be given training and experience at sea, for which purpose they will wear the uniform of the equivalent naval rank, just as naval constructors do. Otherwise it is, of course, a purely civilian service.

RADAR Works for the Navy in Darkness and in Fog

Of the various fields of operation to which scientists have contributed improvements during the war, the most important is radar, the official term covering what was previously known as radiolocation. Its development has absorbed the majority of the temporary scientists and engineers, whose work is carried on in close collaboration with Army and Air Force experts.

Before the present war the movements and fighting activities of our warships were largely dependent on the human eye, as used by look-outs, sight-setters and range-finders. Radar has been perfected to an extent which altogether supersedes these arrangements, and has indeed entirely altered the face of sea warfare. It has involved a complete

There has also been a big advance in anti-submarine detection methods, though these proved adequate in coping with the initial U-boat attack at the start of the war. Equipment today is altogether different and can do much more. Fire control has been similarly improved, the factor of rolling motion in a ship having been given especial consideration in the present system.

IN 1939 magnetic mines laid by enemy aircraft gave serious trouble, until the dismantling of an unexploded specimen by Lieut.-Commander J. G. D. Ouvry led the way to the antidote (see p. 124, Vol. 7). As a result of examination it was found that the German magnetic mine was almost identical with the type we had ourselves begun to lay in 1918. This knowledge was of the utmost value, more especially as we had been faced with the task of sweeping up these mines after the Armistice in that year and therefore had a pretty good idea of how to deal with them.

Later the Germans produced an acoustic mine, as well as variants combining the two

In Belgium's Capital Hitler Went Up in Smoke



BRITISH TANKS rumbling through Brussels were mobbed by delighted crowds who clambered up for a ride wherever foothold could be found (top). It was one of the most amazing manifestations of joy in the world's history. Early on September 3, 1944, Allied troops entered Belgium, freed Tournai, swept on north and east, and in the evening entered the capital. Outside the Bourse de Commerce the people cheered themselves hoarse as Hitler's portrait was ceremoniously burned (bottom).



DRAMATIC RETURN OF THE CANADIANS TO DIEPPE, on the Channel coast of Northern France, on September 1, 1944—when they captured the town without having to fire a shot—must have brought back to many of them terrible memories of the fiercely-contested Reconnaissance in Force of August 19, 1942. Men of these same units of the 2nd Canadian Division—the Essex Scottish, the Royal Hamilton Light Infantry, Saskatchewan Regiment, the Black Watch and the Toronto Scottish. At the great liberation parade on September 3, in the Rue Claudio Grouland (above) General Crerar took the salute. Photo, Associated Press

Young Surgeons in Action With the Royal Navy

Dealing calmly and competently with casualties while his ship is reeling in battle and himself in danger, restoring life to survivors of a wreck, giving succour to crashed airmen, operating for appendicitis during a raging Atlantic gale, decoding secret signals in his spare time: these are among the responsibilities of the Naval Surgeon, as described by Capt. FRANK H. SHAW.

SURGEON, R.N." is his title. In small ships, however, he is usually "Surgeon, R.N.V.R." for wartime expansion of the Navy does not permit the regular red-ringed men to go round. And usually he is young—until he has played a part in his first action; that ages even the most care-free ex-medical-student in a very short time.

Captains and deck-officers see most of the game; the surgeon, stowed away in the stripped wardroom, sees most of the after-effects. In Nelson's Navy the value of a naval engagement was assessed by the size of the "butcher's bill"—men got promotion according to the number of casualties—and the work of Nelson's surgeons inevitably savoured more of the abattoir than the hygienic clinic.

Cruisers, aircraft-carriers and battleships are equipped with a sufficient medical staff and these are furnished with up-to-the-minute operating theatres, sick-berth stewards, even nurses: the last word in blood-transfusion machinery is at instant call; all the messy work entailed by action can be conducted below the waterline in armoured security (if even the biggest battleship can be deemed secure) but the small-ship "Doc" must make shift with improvisations nine times out of ten, even though his little ship is in the firing line ten times for its big brother's once.

THERE is, in a destroyer, no recognized cockpit; usually the officers' wardroom is converted into a hospital, with surgical instruments laid out where normally eating utensils would be arranged. One sick-berth steward is at hand to administer an anaesthetic, pass an artery forceps or otherwise make himself as useful as a whole, highly-trained staff. There is no warranty, as a destroyer races into close action, that an enemy shell will not make its first hit in the wardroom, thus wreaking havoc amongst the best-laid plans. No wonder Navy surgeons claim executive rank! They haven't even the protection of sand-bagged bridges or armoured-plated gun positions.

A big responsibility attaches to these youngsters, many of them fresh from the training hospitals, who have never previously been required to accept responsibility of the major sort. There is no court of appeal to which to turn when the dilemmas come. But experience teaches them the art of "making-do"—and their record throughout the war has been a proud one. When no action is pending, they are usually asked to serve as "code-and-cipher" officers, disentangling the innumerable secret signals brought down below by the wireless telegraphists; and there is always enough purely local practice to keep their minds occupied, for hurrying small ships are hotbeds of minor casualties: scalds, burns and contusions, even more serious harm, often need immediate attention.

In the Thick of Grim Activity

A destroyer, the Navy's maid of all work, seems to attract to herself all the flotsam of salt water. A protecting aircraft, for instance, might crash into the sea; or a Catafighter pilot might bale out in near proximity. Naturally, the small ship hurries to the rescue, to save survivors; and as the exigencies of war sometimes compel a crashed airman or aircraft crew to be immersed for lengthy spells, the ailments thus arising demand attention, to say nothing of serious gunshot wounds, or the scorching horror of petrol burns. Or a ship's lifeboat, adrift for days—even weeks—might be sighted.

manned by an emaciated, despairing crew; then it is up to the ship's M.O. to provide comfort and easement for the sufferers, to work over them assiduously, encouraging every flickering spark of hesitant life; to improvise remedies for immersion-foot, starvation, exposure and the countless evils that afflict those cast away in open boats, especially in a North Atlantic winter.

It is seldom that skilled assistance is available to the Doctor, for in small ships every member of the limited crew is a specialist, with his own appointed niche to fill in the general scheme. There are, of course, volunteers: an off-watch officer, a rare passenger; but few of these have any knowledge of the trade of medicine, and are apt to perpetrate blunders; the Doc must supervise everything they do with the closest care.

tion taught in the surgical wards of the hospital of his training. No matter if the wardroom is ablaze from end to end, that enemy shells are screaming imminently near, that the ship is shaking and staggering at heavy hits, that she is jolted half-way out of the water by shell-bursts close alongside, or near-misses by 1,000-lb. bombs; he must continue his merciful labours without a tremor. And, since the wounded take their courage from him, he must affect a coolness and unconcern that he probably does not feel; for any next moment might find the surgeon blown up through the decks overhead, and swimming for dear life outboard.

Hurled into Littered Scuppers

With choking wafts of cordite smoke causing horrible inconvenience; with the oily smoke of the protective screen that belches like something solid from the gushing funnels, to be drawn down below through the ventilating fans, until the wardroom is as murky as a London street in its worst fog; with the ship rolling and pitching to an extent that hurls the suffering patients from operating table into littered scuppers, unless miracles of prompt assistance are given, being a destroyer surgeon in action is anything but child's play, indeed.

The only thing to do is to keep one's nerve, to do as much as—and a little more than—one pair of hands is capable of performing. It might mean a consecutive stretch of uncounted hours on duty; it might mean that as the cockpit is filled to suffocation-point with his own shipmates—men he has learnt to know, admire, even to love—a fresh batch of salved enemy wounded is hauled aboard, each man suffering even more grievous hurt than his own associates. And humanity dictates the same careful attention to all; for a wounded man ceases to be an enemy the moment he is laid on the bloodied deck of the rescuing ship.

No wonder the London Gazette publishes so many instances of "devotion to duty under enemy fire," on the part of naval surgeons. They have earned many proud decorations, and they have earned them well. Not for them the comparative ease and security of a peaceful country general practice, or a hospital interne's busy, ordered existence. They'll tell you that most of the seagoing surgeon's work consists in killing time, in acting as mess president, in deciphering complicated signals; but they know what they know. It occasionally happens, even in the best regulated ships, that emergency operations are required for appendix trouble and the like; and the youngster who has practically never attempted even a minor operation is confronted with a set of circumstances that demands instant action.

A destroyer was boring an uneasy way through a North Atlantic gale that threw her about like a chip in a maelstrom, when a rating chose that inopportune moment to develop acute appendicitis symptoms. There was need for instant operation. Everything was made ready; the agonized patient was anaesthetised, laid out on the hastily-cleared wardroom table. The young surgeon made the initial incision with a trembling hand; it was his first abdominal case. Hardly had he done this when the lively destroyer did everything but turn turtle. Doctor, aides, patient, all slithered in a tangled heap to leeward. "But that roll did the trick," said the surgeon. "When we picked up the patient his appendix stuck up through the incision like a flag-pole; all I had to do was suture it and cut—a first-class recovery!"



Surgeon-Lieut. MAURICE J. HOOD, D.S.C., of the R.N.V.R., lost his life after saving a young American seaman suffering with acute appendicitis. Rather than risk seaman's lives in transferring him to the British destroyer from which he had been summoned, he remained aboard the merchant vessel. Three days later it was torpedoed and sank in seven minutes. Lieut. Hood had previously won the D.S.C. for jumping, in a gale, from the icy deck of his destroyer to another vessel to attend to 81 wounded men. Photo, G.P.U.

Over the Seine in Hot Pursuit to Brussels



CONFIDENT and cheerful, British troops (above) hauled a flat-bottomed boat through the streets of the ancient town of Vernon, 14 miles northwest of Mantes, on the left bank of the Seine, in preparation for the crossing which was effected by British and Canadians on August 26, 1944.

"A little classic" was how this crossing was described by Lieut.-General B. G. Horrocks, commanding the British 2nd Army corps, whose armour made the spectacular dash from the Seine to Brussels—206 miles in 6 days against steady opposition. This corps was moved across American lines of communication and, complete with bridging material, formed up at Vernon (which the Americans had captured) on August 24, for the crossing two days later.

R O Y A L ENGINEERS laid a pontoon bridge across the river (right) as soon as the infantry had overcome enemy resistance. Skilfully and swiftly the way was thus paved for the transport to the far bank of light guns and Bren carriers to support the troops pursuing the Huns.

AFTER enemy guns laying down a barrage had been silenced by Allied artillery, our men, without cover, embarked in their flat bottomed boats (above) and crossed under rifle and machine-gun fire.

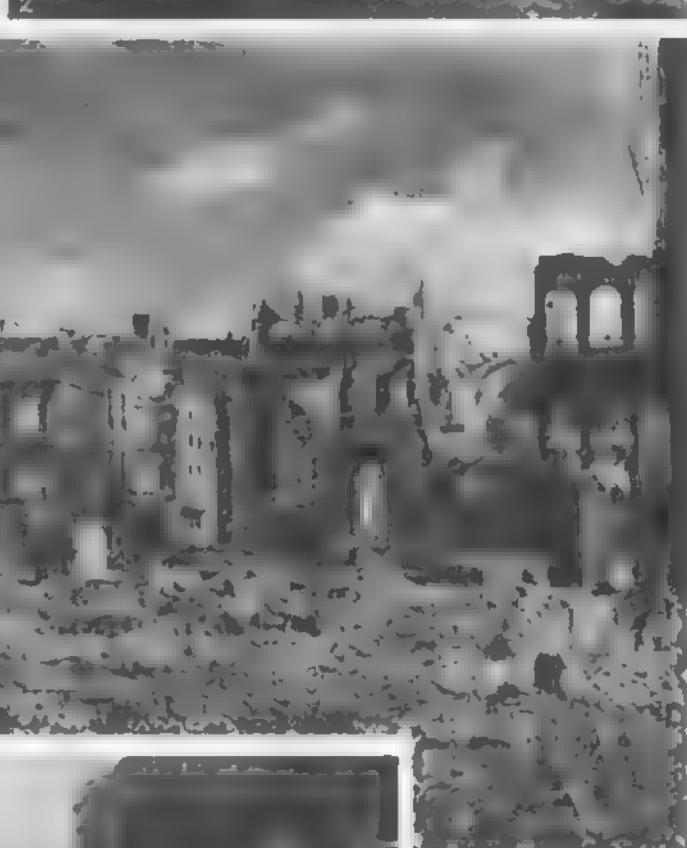
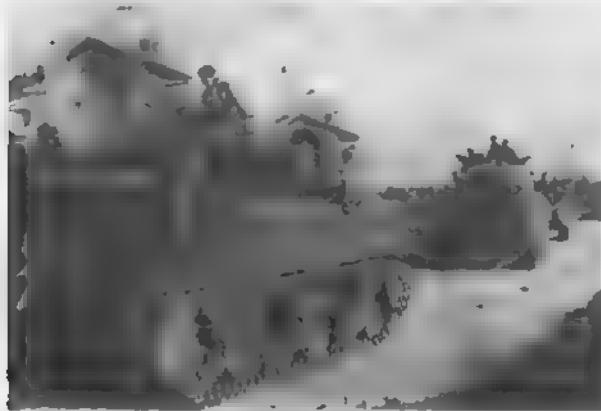
This thrust had commenced in the area of Dreux; the Seine crossed, our armour sped on through Beauvais, Amiens, Arras, Douai and over the Belgian frontier, to reach Brussels on September 3. Men of the Maquis and the Belgian "White Army" were given the tasks of preventing bridges being destroyed, locating and reporting enemy mines, and mopping up bypassed groups of Germans.

WRECKAGE of a beaten army in headlong retreat, hoping to escape across the Seine, was strewn along part of the river bank. Transport vehicles, mostly horse-drawn, and immense quantities of stores and material, had been shattered by Allied bombing (below).

Photos, British Official, British Newspaper Pool



Memories were Stirred on Battlefields Regained



FROM THE PAS DE CALAIS to the Argonne the Allies swept forward, aided in the great drive by French Forces of the Interior. Near Fouilley, at the beginning of Sept. 1944, British armour passed 1914-18 war graves overlooking the Somme Valley. In 1940 the Battle of the Somme had opened on June 5. Our troops approaching the railway station at Arras (2) on Sept. 1, 1944, trod ground that in May 1940 was the scene of a magnificent stand by a British force against overwhelming German onslaught.

Canadians gained the wrecked town of Rouen on August 30, 1944; from the cathedral the Tricolour flutters (3). On June 9, 1940, Rouen had fallen.

In Amiens (4), regained on August 21, 1944, bare-headed German prisoners halted as members of the F.F.I. carried the bodies of fallen comrades to their last resting-place. German motorized columns had reached Amiens on May 21, 1940.

Photo by Official U.S. News Paper Pool, New York Times Photos

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How We Blasted the Huns with Flame in France

When Britain's fortunes were at lowest ebb in 1940—when the Army had returned almost weaponless from Dunkirk and the full fury of Hitler's hordes threatened this country—Ramsgate beach saw the first active steps taken towards the development of amazing new weapons which are now searing great paths through the enemy's most formidable defences.

At dusk on July 14, 1944, a Scottish regiment launched an attack on a German position north of Esquay in Normandy. Strongly entrenched in the edges of woods and along the hedgerows, the enemy could not easily be overcome by any ordinary plan of engagement. But this assault was to hold surprises for the Germans against which they could not hope to stand.

Astride a roadway the attack went in—one troop of tanks on each side of the road, each troop followed by a platoon of the infantry, one section keeping close up to the armour. Suddenly through the half-light enormous flames roared out and licked fiercely at the hedgerows and forward undergrowth of the woods. Bushes and saplings were wrapped in fire. In that fiery, crackling inferno no man could live.

From this awesome threat of being consumed the Germans turned and ran, presenting their backs as targets for the bullets of the Scottish infantry. Some stayed, and were burned. And the position was taken without loss to the attackers. Subsequent interrogation of prisoners left no shred of doubt in the minds of the questioners as to the devastating and utterly demoralizing effect of this flood of liquid fire from our Crocodile flame-throwers.

For this section of the enemy it was the first (and for many the last) experience of Britain's new device for blasting a way into Normandy and so through France. Others had already made its fearsome acquaintance. Thirty-five minutes after our landing on D-Day (June 6) our Crocodiles went into action, and they led the British 2nd Army in the advance to Crèpon (9 miles N.E. of Bayeux). Our flame-throwing Crocodiles, Wasps and Lifebuoys took part in almost every operation, fighting with every British and Canadian formation in the Normandy bridge-head.

"The Churchill Crocodile is the most powerful flame-thrower in the world today," declared Mr. Geoffrey Lloyd who, as Minister of Petroleum, formed in 1940 the organization known as the Petroleum Warfare Department. "With its special fuel it shoots a flame that is truly terrifying and deadly. We designed this weapon to burn out the strongpoints of the Atlantic Wall and Hitler's 'Fortress-Europe' and to save the lives of our infantry carrying out the assault. All this has developed from our first crude experiments to improvise burning oil defences on the beach at

Ramsgate on a June afternoon in 1940. All of us who were there became keen believers in the effectiveness of flame warfare. That band grew and included people with the most varied, and indeed unorthodox, qualifications."

From those first hasty experiments, undertaken in every circumstance of personal danger, our three flame-throwers have developed. The Germans, who had used flame-weapons in the last war, were well provided for this war with new equipment on improved lines. We started from scratch, but fortunately we were possessed of ample stocks of oil. Not until the Dieppe raid did our troops go into action with anything of the sort; then the Commandos used flame-throwers of an early type to such effect that a German coastal battery was put out of action.

Our Ramsgate beach experimenters suffered painful burns and injuries, but the research went on—with all possible haste, for there was every likelihood of an attempted landing on our shores by the enemy, and our immediate objective, in the event of that happening, was to fling a protective curtain of flame over Britain from the beaches, the harbours, the lanes and the highways.

A satisfying measure of success was achieved in these preparations, and it became possible to switch from thoughts of defence to assault. In due course there rolled from the factories (the Ministry of Supply being responsible for production) these mighty weapons whose use has been attended with such tremendous success.

Immense efforts were called for on the part of the firms concerned, varying from foundrymen to footwear manufacturers and from racing car builders to laundry engineers! The workers, pledged to secrecy, were given a glimpse of the result of their labours by films and demonstrations. Discouragements, inevitable in the evolution of any novel weapon, were many; types were changed, modifications were introduced, older attempts outmoded. There came the final call for a last lap sprint for D-Day. The Crocodiles were needed 35 minutes after the Normandy landing. Nobly the workers responded. They even collaborated in the special and urgent training of the troopers who were to man the flame-throwers.

That early work of the Petroleum Warfare Department had indeed borne striking fruit. Speaking of the later work on the mobile

flame-throwers in Bren Carriers, Mr. Geoffrey Lloyd said, "We owe a great debt of gratitude to General MacNaughton and the Canadian Army, particularly the Engineering Corps. Their enthusiasm matched our own. The Canadian Army carried out the first practical trials with the new weapon and the Canadian Government placed the first large order."

Fitted to the heavily armoured Churchill tank, the most powerful and effective of these flame-throwers is the Crocodile. The armoured trailer which carries the fuel is towed by the tank, and the fuel is led forward through an armoured pipe. Should need arise, the trailer—universally articulated so that it can move in any direction—can be jettisoned by means of an ingenious device.

The trailer itself is controlled from inside the tank, and its movements are indicated by pilot lights mounted on a panel in front of the tank commander. This makes it unnecessary for the commander to expose himself to enemy fire in order to see just what is happening at any given moment. One specially useful and interesting point about the new type of fuel that is used—it can be projected to distances of over 150 yards—is that it can be fired around corners, so that it will ricochet and produce persistent flame in every cranny of pillbox and trench.

The Lifebuoy flame-thrower, deriving its name from its appearance, has a ring-shaped tube as container for the fuel, with a spherical container for compressed gas, the device being carried on the operator's back. The flame is projected from a "gun" which incorporates an igniting mechanism. The range is about 50 yards, and the Lifebuoy has been used with outstanding success by our parachute-troops, and Commandos, and Canadian infantry. For dislodging the enemy from otherwise "awkward" positions and exposing them to the small-arms fire of the infantry it is in all ways admirable.

Where more devastating and "frightening" action is required, the Wasp—intermediary between the Lifebuoy and the Crocodile—is available. Its larger fuel supply and greater mobility render it more suitable than the Lifebuoy for big operations. This thrower is fitted to a Universal Carrier. Tanks containing the liquid fuel and compressed gas are mounted on the carrier, the flame-gun projecting through the front armour.



A MIGHTY FLAME REACHING TO 150 YARDS originates in the fuel-trailer (left) of the Churchill Crocodile flame-thrower and is emitted from the projector nozzle (right) in the nose of the tank, which is seen in action in the facing page. The armoured trailer is towed by the Churchill, the connection being so devised that it can move in any direction and be disconnected if necessary. The special fuel passes from the tank in the trailer to the nozzle via an armoured pipe.

Terrifying British Weapons throw Liquid Fire



THE LIFEBOUY FLAME-THROWER in the aiming position (above), and in action (right). The ring-shaped tube, or "lifebuoy," carries the special fuel; the spherical container in the centre is charged with compressed gas. Igniting mechanism is incorporated in the "gun."



THE CROCODILE flame-thrower is fitted to the heavily armoured Churchill tank, and the devastating and demoralizing flame is thrown forward 150 yards or more (above). What is perhaps even more terrifying to the enemy, the flame will bend and search him out in trench and pillbox corners. See facing page.

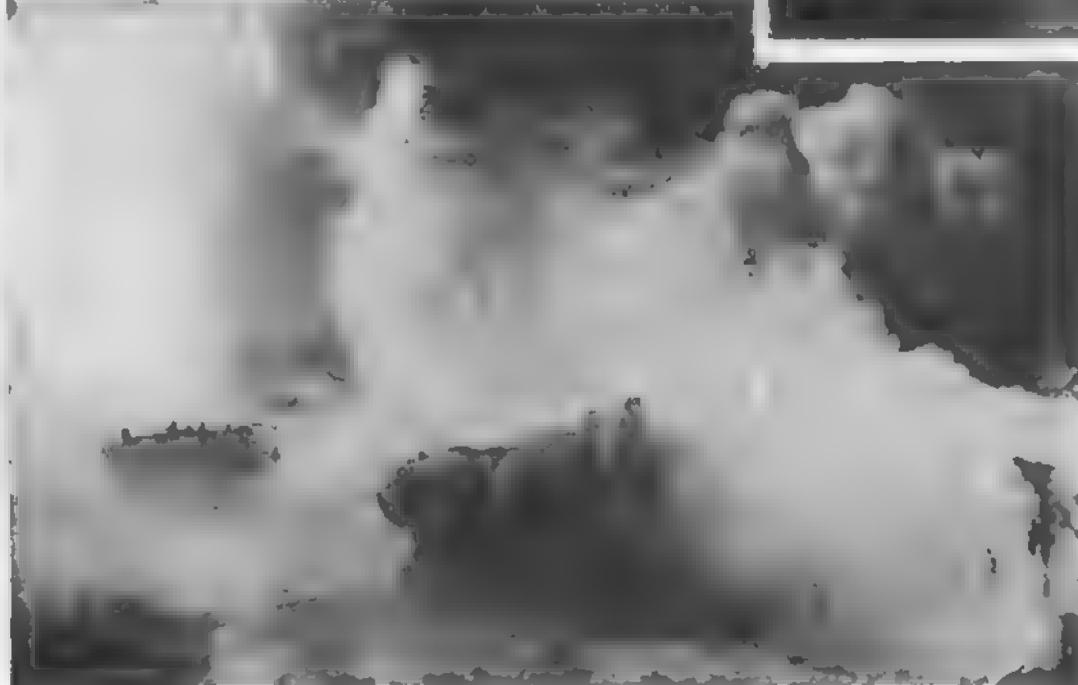


THE WASP is fitted to a Universal Carrier, the flame gun (above) having a range equal to that of the Churchill Crocodile. Pipes lead from the projector to fuel and compressed gas tanks which are easily removable; in the field they can be taken out quickly if it is desirable that the carrier should resume its normal role, and can be replaced at once if flame-throwing operations against the enemy are to be resumed.

Wasp in action (left) can go forward in the face of heavy gunfire, the body of the carrier being bullet-proof. Their larger fuel supply and greater mobility make the Wasps more suitable for large-scale operations than the man-carried Lifebuoy.

The story of the development and use of these new weapons is told in the facing page.

Paul A. Brinkley, a Cross
Copyright: New York Times
Photo: U.S. U.



An End to this World-Curse of German Minorities!

A complicated problem which the post-war world will have to unravel is that of German minorities in foreign lands. In the past a continual source of trouble, they have been ever ready to turn Fifth Columnists in the service of the Reich. Here HENRY BAERLEIN points out future dangers and how, with foresight and determined action, they might be avoided

WHEN the German armies in Russia were advancing towards Stalingrad and the River Volga, a most necessary step was taken by Marshal Stalin—which, according to the German radio, was “shamelessly barbaric.” If the 80,000 Germans, most of them Swabians, who dwell on the banks of the great Volga had not been evacuated to the Urals, by Stalin’s orders, there can be no doubt that some of them would have continued to function as very active Fifth Columnists.

There are other European countries which, after the war, will have to face a similar problem; if they leave it unsolved it will be to their peril. Such is the nature of the German abroad that he scarcely requires any propaganda from Berlin. For instance, when after the last war the two small districts of Eupen and Malmedy were incorporated in Belgium and given tolerant Belgian government, the German minority was most unhappy without the severe discipline to which their compatriots in Aachen and Cologne were being subjected, feeling like lost sheep. This yearning for the jack-boot will have to be taken into account chiefly by Czechoslovakia and Poland.

THE three or four million German-speaking inhabitants of the Sudeten districts of Czechoslovakia will be reduced to perhaps 1½ millions after the war, for many have fallen in the East, others have secured positions in Germany, and at least 20 per cent are painfully aware that their names are on the lists of war criminals. It is thought that those who remain will not automatically be granted Czech citizenship, but will have to ask for it; and that perhaps two-thirds will receive the provisional grant of it, that is to say, “first papers,” dependent on their behaviour, as in the United States.

There should be no self-determination for villages, but for the nation. In other words,

the policy of allowing a village with 20 per cent of Germans to have a German school at State expense is likely to be abandoned; a citizen enjoying full rights will have to know the State language. Others may remain as aliens without vote, and in the event of unemployment preferential treatment would be given to full citizens. By bitter experience the Czechs have learned that their legislation between the two wars was far too liberal for the mentality of those who were persuaded that the republic would never endure. Of course, the old and strong mountain frontier of Bohemia should be restored to what Mr. Chamberlain called “an unknown country.” It should be reinforced by Slovak and Ruthenian peasants from the more arid parts of the Republic, and by inviting the Lusatian Serbs to come from Saxony, where even Hitlerian methods have not succeeded in obliterating the Slav spirit of these sturdy folk.

Land-Grabbing Policy in Poland

In the 1886-1918 period, during the activity of the Colonizing Commission, the Reich spent over 500 million gold marks on subsidies designed to increase the number of Germans in the Polish provinces. After years of expropriation of Poles in favour of Germans, and of subsidizing German landowners, 26 per cent of the arable land in the province of Poznan (western Poland) was in German hands, although the Germans formed only 9½ per cent of the population.

THE colonization of East Prussia, much earlier, had a hostile and Germanizing character. And when Poland was restored, after the last war, the Germans everywhere in the country were egged on, if that was needed, by their Press in Poland to prevent normal and peaceful relations between Poles and Germans. Any German who refused to obey the leaders of the *Deutsche Vereinigung* (the principal German minority organization,

was boycotted by all the members in social and business life.

The German minority in Poland in 1939—when Hitler was hysterically screaming that their life had been rendered unendurable—had no less than 394 elementary schools, 15 high schools and 13 for girls, using the German language, maintained at the expense of the Polish Government. When the western parts of Poland were parts of the Reich, the Poles, although admitted by official German statistics to be in the majority, were treated as second-class citizens, with no schools in their own language. After this war the Poles will have to see to it that this Trojan horse is well muzzled!

In 1939 when the population of Rumania reached the 20 million mark, the number of German settlers there amounted to some 800,000, many of them descended from the men brought in by the old Austrian Empire in the eighteenth century as “Frontier Regiments” against the Turks. They enjoyed special rights, which have been preserved, so that in February 1942 Iuliu Maniu, the revered Liberal leader, wrote to Marshal Antonescu pointing out that the Germans were becoming a State within the State, viewing with equanimity the disappearance of Rumania and working for the “Danube State” which was to be the guardian of that most important European traffic-artery, the Danube, and of the shortest way to India.

Curious Position of Hungarians

In the last Yugoslav census of 1931 it was seen that about 500,000 Germans (i.e. 3·5% of the population) lived there, enjoying the fullest freedom. In Slovenia the heavy industry was in their hands, while their banking position became ever more potent. It is interesting to note that the German minority sent no complaints to the League of Nations, and even Hitler, in 1938, said bluntly that “the German minority is nowhere better off than in Yugoslavia.” Nevertheless, their leader in Parliament, a certain Herr Hamm, made a speech demanding not only “cultural” but also political autonomy. One of the measures Yugoslavia will have to take after the war is to investigate what happened after the agrarian crisis from 1930 onwards, when Germans, using assumed names or openly, began to acquire landed property on the northern borders of the country and by the side of railways and canals. Once bitten . . .

The Hungarians find themselves in rather a curious position, for the German doctrine of the *Herrenvolk* is the same as that which the Hungarians have themselves carried on for centuries against the Slavs and Rumanians in their country. Now Basch, the leader of the half-million Germans, has obtained for them such conditions that Hungary has become economically completely dependent on the Reich. This was to the advantage of Hungary’s feudal class, but the only hope for the future prosperity of that country lies with a people whose democratic instincts have never been allowed to develop.

WHEN Transylvania was arbitrarily divided by the Axis between Hungary and Rumania, most German settlers found themselves in the former country. With Rumania now very prudently throwing in her lot with the Allied Nations, who, of course, did not recognize the Axis award, the wiser of these Germans will return to their economic activities, not participating in the conflict of words—possibly of deeds—between the two countries.



KING MICHAEL (right), 22-year-old ruler of Rumania, gave a lead to other satellite States when he quitted the Hitler alliance. In a dramatic proclamation on August 23, 1944, he announced that his country had ceased fighting the United Nations and would forthwith support them in the prosecution of the war.

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Photo, Associated Press



Cheers and Homage in Paris Freed

Entering Paris with French and U.S. troops on Aug. 26, 1944, British soldiers received a specially tumultuous welcome (above) as soon as their battle-dress was recognized by the wildly delighted Parisians—free to live their own lives again after four years of German oppression. At the tomb of the Unknown Soldier beneath the Arc de Triomphe (right) three of our war heroes paid solemn tribute to the past glories of France and greater glories yet to come. General de Gaulle, who reached Paris on the evening of August 25, placed on the tomb a wreath in honour of France's sons who fought and fell by the side of the British in the war of 1914-18.

Photos, British Official, British Newspaper Pool





De Gaulle Symbolizes France's Liberation—

From the Arc de Triomphe down the Champs Elysées, across the Place de la Concorde and so along the Rue de Rivoli (1) General Charles de Gaulle passed between cheering multitudes. Not yet, however, had the last acts of Nazi terrorists been recorded in the annals of the capital; as units of the 2nd French Armoured Division passed in procession through the world-famous archway (3) shots rang out to mar one of the greatest celebrations ever held in Paris.

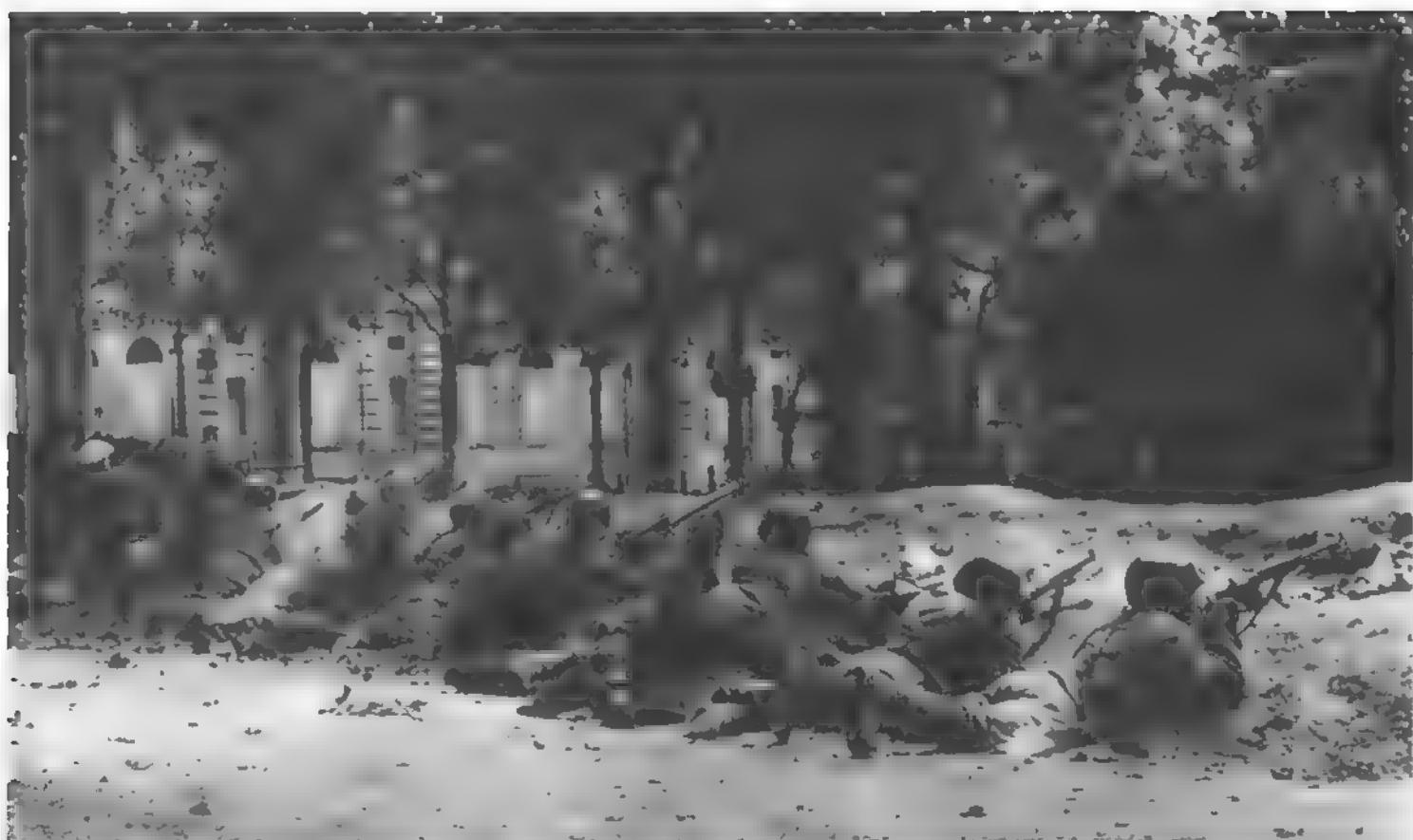
*Photos, Ass. U.S. Official
P.N.A. & British News
Press Pool*



—Whilst Snipers' Bullets Whine Overhead

From cheers to threat of death by snipers' shots aimed from a building in the Place de la Concorde: the startling interruption turned celebrations into a scurry for cover. Lamp-posts and even barbed wire "knife-rests" gave to crouching figures some fancied sanctuary from the hail of lead (2). But the jubilation of a city freed at last could not be stifled, as this sea of happy faces photographed in the Place de l'Opéra (4) vividly testifies.





The Last Round-up of Frenzied Huns

Photos, Keystone

Patrols of General Leclerc's 2nd French Armoured Division reached Paris on the evening of August 24, 1944, and made contact with the F.F.I. Twenty-four hours later organized German resistance had ceased; but fanatical snipers had yet to be silenced. French troops proceeded with the mopping-up (top), whilst a lone comrade in another street did execution with a light machine-gun. In the battle for liberation 1,496 French people were killed, 552 wounded.

VIEWS & REVIEWS Of Vital War Books

by Hamilton Fyfe

WE at home felt badly when we heard day after day two years ago of things going badly in Burma. What do you suppose were the feelings of the men on the spot as they had to retreat before the hordes of oncoming Japanese? The airmen especially, who were outnumbered so heavily by the enemy, but who believed they might hold on if only the Army could stay put. They were doing magnificent work. To be pulled back made them both sad and furious.

How they took it, Kenneth Hemingway lets us see in *Wings Over Burma* (Quality Press, 15s.) without indulging in any complaints or laments, but allowing their thoughts and feelings to appear through the slang talk of himself and his fellow-airmen as they sit in their mess, hurry to their airfield when the telephone calls them, go up on bombing raids or escort flights, get back and talk their day's or night's work over.

They seem to have been, even for airmen, an unusually cheerful lot. The author himself is a man with an infinite capacity for enjoyment. He could find delight in being out before dawn on a February morning when "a battledress top" was needed to keep in the warmth of a body going out into cold air, with the task of raiding a Jap airfield awaiting him.

I find one never wearies of being first out on an aerodrome, whatever the circumstances, whether it be an operational or quiet station. It is a satisfaction constantly pleasing, as fishing is to an angler or country walks to a townsman.

Whatever the climate, at dawn comes an expectancy, the optimism with which one makes New Year resolutions. The hangars, the surrounding country, and the aircraft all gleam as if they had been cleaned with a bucket of dewdrops. Though it is a modern scene brushed with machinery, oils, steels and glycols, its essence is the maturing of the spirits of Drake's galleons, Nelson's ships of the Line.

Mr. Hemingway, you can see, is something of a poet.

It is not cold in Burma in the daytime. The heat is described as almost unbearable. The clothing worn is of the lightest after the sun has gained power, which it does very quickly. Yet at a great height in the air the temperature is low again, so warm clothes must be worn, whatever the thermometer on the ground says. It was a harassing life the airmen led. How harassing they fortunately scarcely realized until they had a holiday. Only a couple of days, but that, in the midst of a campaign, was enough. Two weeks would have been too much. After a fortnight

ease permeates a man's being; his resolves and reactions, like a jigsaw of many pieces, cannot be reformed into the men of a complete fighter in a day . . . Twelve days of refined food, baths, clean clothes, and you like civilization, subconsciously maybe, too much!

But for two days they were thoroughly contented

with no telephone by our side all day and every day to ring suddenly and raise our hackles, with none of the tension of that sitting around in the dust and heat, and then patrolling, patrolling again, and more sitting; and among it the sudden skirmishing dog-fight and the scrambling from sweaty heat to too cool a comfort above.

They spent their holiday at a military hill station, Maymo. On the road to it they passed through Mandalay. They had expected picturesqueness, and from a distance its pagodas, hundreds of them, supplied it; but inside . . .

there was garbage strewn on the pavements; its inhabitants looked as if they wanted a wash, and the stucco of the buildings in the main streets was more often than not peeling in a porridgeous dinginess.

The cantonment, when they came to it, surprised them by its fine buildings, trees and gardens, golf and sports grounds, spacious houses, brick and half-timbered as in a London suburb, with well-kept drives up to them and a setting of smooth lawns. In a large, luxurious residential club they found quarters of the most comfortable

attitude of yours naturally creates resentment." So it came about that men of the British forces had to be always "on the *qui vive* for some hostile Burman popping up knife in hand." It is only fair to add that in other parts with which this author was evidently not acquainted the Burmese gave us a good deal of help. We should have received more from them if we had taken more trouble to make them like us.

WE suffered in the Far East from shortcomings in the past and from muddling at the moment of danger. We ought not to have lost Burma. Mr. Hemingway does not deal with the reasons for our losing it, though he lets us see they caused a good deal of heart-searching at the Front. We need not have lost it if quick decisions had been taken. In the House of Lords some two years back Lord Addison read out a letter written by the colonel commanding a Scottish regiment, who was posted as "missing, believed killed." This told how a plan was framed to forestall the Japanese landing in Siam. Put into operation at once, it would have stopped them seizing a base for their attack on Burma. But it was held up because our Intelligence Service reported Siam as a friendly nation, whose neutrality we must not infringe. When the Japanese landed it became clear at once that the Siamese were on their side, and had been all the time.

Many of us must have wondered how, when airmen reassemble at a meal after some big flight in which many have gone down, and see the unoccupied places, they feel about their comrades who have left them, and whether it makes them gloomily reflect, "It may be my turn tomorrow." Mr. Hemingway deals with this.

One soon forgets. Our faces quiten at such news, we mutter indistinctly sometimes when it is someone in our own squadron, yet to imagine that pilots moon about afterwards with grim faces and, when they next go into action, snarlingly press the gun-button with "And that's for George" is plain type. We are at war; our instinct is to push such incidents away in the subconscious and get on with the job. It affects us only when we are growing "operationally tired" or when the man killed has been such a key personality in the squadron that his extinction is comparable to losing an elder brother or young sister. Besides, the punch of salt to every stew of grief is the selfish thought it might be yourself next. Naturally we refuse to brood over that.

Passages like this give the book a value beyond that of its topical interest and the light it throws on the conditions of the Burma campaign in the air.



SPITFIRES IN BURMA established clear superiority over the Japanese Zero. Here in a forward airfield "Spits" are lined up for the fray; in the foreground, surrounded by boxes of ammunition, the pilots are waiting. The manner of life our airmen led previous to the evacuation of Rangoon is described in the book reviewed in this page. PAGE 307 Photo, Indian Official

Russians at Bucharest and East Prussian Border



SOVIET ARTILLERY FIRED ON GERMAN TERRITORY in East Prussia when, on August 17, 1944, Red Army forces reached the enemy frontier north-west of Mariampol: for the first time in this war the Germans were given a dose of their own land-war medicine. The shelling of German soil was a milestone in the great summer offensive, staged all along the front from Finland to the Carpathians, which carried the Russian forces 350 miles forward, and brought about the defection from the Axis of Rumania, Finland and Bulgaria.



STALIN'S TANKS ROLLED INTO BUCHAREST on August 31, 1944, after troops of the 2nd Ukrainian Army had advanced 35 miles from Ploesti in a day. This victory, in which the tanks figured largely, followed the rout of the Germans who had made a last-minute stand north of the city. As the Russian armour passed through Rumania's capital people thronged the streets to make plain their welcome of these representatives of the onweeping Red Army. See illus. p. 302.

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Photos, Pictorial Press, U.S.S.R. Official

Armed Might that Gladdened the Heart of France



THOUSANDS OF U.S. TROOPS with tanks and other armoured vehicles passed through the streets of Paris on August 29, 1944, on their way to the front. In a two-hour procession massed infantrymen marched down the Avenue des Champs Elysées to the Place de la Concorde, where Lieut-General Omar Bradley, commander of the 12th Army Group, and General Charles de Gaulle took the salute. In the background is the Arc de Triomphe, draped with the Tricolor. *Photo, Associated Press*

Royal Air Force Regiment in Action Overseas

On the Burma front, in desert battles from Alamein to Tripoli, in Sicily and Italy and France, the youngest branch of the youngest British service—the R.A.F. Regiment—has won undying fame. This article, specially written for "The War Illustrated" by Sgt. A. J. WILSON, tells of the origin and splendid achievements of this now mighty corps.

"Just a minute, chum!" The leading aircraftman with the flash of the R.A.F. Regiment on his shoulder looked around as the call came from a hospital train which stood at the up-line platform of a station in Southern England. At an open carriage window was a wounded soldier of a famous North Country regiment just back from the Normandy battlefield. The soldier thrust his arm through the window and shook the airman's hand.

"I've been wanting to do that ever since I first saw your lot in action!" the soldier said. "They're doing a grand job over there—good luck to all of you!" Like many other British troops who carried out the landings in Northern France on D-Day, the soldier and his comrades had been surprised to see men of the R.A.F. Regiment in the first landing craft which nosed their way through the minefields and other obstacles off the Normandy coast.

But for the Regiment, this was by no means their first major action. They had gained their battle experience in the Western Desert and in Tunisia; they had taken part in the landings in Sicily and Italy, and had won undying fame on the island of Cos in the Dodecanese. The Regiment had, in fact, seen as much of the enemy at close quarters as many of the Army units with whom they shared the hazards on the beaches of Normandy.

The R.A.F. Regiment's chief task, at home and overseas, is the defence of airfields from attack, both from the air and from the land. In France, every British aircraft which operates from the captured airfields or landing strips laid down by construction units does so under the protection of anti-aircraft guns of the Regiment. Night and day, the airfields are guarded and vital points picketed by the men in khaki and blue. Aircraft, pilots, ground crews and stores are all dependent for their safety on the watchfulness of the airmen-soldiers.

It is now four years since the R.A.F. began to provide their own airfield protection. In 1940, when the German Army was roaring westwards across Europe, smashing everything in its path, ground defence units were formed within the R.A.F. to guard our airfields from the invasion which seemed so imminent. Army officers, many of them last war brigadiers and colonels, were specially selected to command the units and sent hurriedly off to vital bases, the single thin ring of a pilot officer on the sleeves of their new blue uniforms contrasting strangely with the rows of ribbons on their chests.

Ready for the Nazi Onslaught

The chief equipment of these first units were Vickers and Lewis guns—and pikes! The unit commanders themselves had to make their own arrangements for the manufacture of pikes. Nearly everything had to be improvised. At some stations the men managed to get hold of some small cars which they armoured, while one unit was presented with a couple of five-ton lorries, with concrete gun turrets, which proved almost too heavy to move. Through the anxious days of the Battle of Britain the men stood ready at their action stations, waiting for the invasion that never came.

The rapid expansion of the R.A.F. in the following year made it clear that if the airmen were to continue to look after their own airfields many more men would be required and the individual units put under central control. Eventually, after many Air Ministry

and War Office conferences, it was agreed to form a special corps; and on February 1, 1942, the R.A.F. Regiment officially came into being, with Major-General C. F. Liardet, C.B., D.S.O. (now Sir Claude Liardet), taking charge as Commandant of the Regiment and Director General of Ground Defence.

Each R.A.F. Home Command was given a Chief Defence Officer, who was responsible for the administration of all Regiment squadrons in that Command, and a comprehensive training programme was arranged. All men did the basic training of an infantry soldier in the regular Army, a battle school was started and there was specialized training for the anti-aircraft gun crews. They took part in combined exercises and very soon reached a high pitch of efficiency. At first the scheme applied only to home service, but within a few months squadrons were on their way to all parts of the world where there were R.A.F. aircraft operating.

Out in the Middle East, where Rommel's dash across the Desert had brought him to within a few miles of Alexandria and Cairo,

attack as he went tearing back towards Tripoli with the 8th Army close on his heels.

Meanwhile, other squadrons of the R.A.F. Regiment had embarked in the great invasion fleet for North Africa, and, with their comrades from the Western Desert, they played a vital part in the final stages of the Tunisian campaign. For a time some squadrons were attached to Army units in the line for battle experience and later the airmen were among the first British troops to enter Blera and to pass through Tunis, following the armoured forces into the city. In a few days they took more than 3,000 Axis prisoners and captured a vast quantity of valuable equipment, as well as mounting their guns on the captured airfields.

Gunning the Germans at Cos

In Sicily, and in Italy, men of the R.A.F. Regiment were again in the first landing barges, and at Cassino this year they held part of the Allied line in the mountains north of the town. But perhaps the most glorious chapter in the history of the Regiment in its first two years of war was at Cos, where its men were continually in action from the day of the British landing in September 1943 until the island was retaken by the Germans three weeks later. Even after resistance to strong enemy tank and infantry attacks seemed hopeless, they continued to fight on in the hills against overwhelming odds.

Through many ground-strafing raids the guns of the Regiment were the island's only defence against air attack. It was impossible to dig in the guns or protect them in any way, and in almost every raid the unprotected crews suffered casualties from the cannon and machine-gun fire of German fighters or from the tail gunners of the bombers.

A Royal Artillery officer who escaped from the island paid this tribute to the men: "All of us who saw the R.A.F. Regiment gunners in action were impressed by the grand spirit of the gun teams, who were determined to fight their guns no matter how easy a target they presented. There was a cheery and defiant courage about them and a pride in their Regiment which impressed us all. We will always remember them for their unfailing cheerfulness, their determination to fight their guns to the end and their great courage. We were all proud to know them."

It was with the same determination and courage that squadrons of the Regiment embarked for Normandy on the night of June 5, 1944. They knew their job and they were determined to see it through. On the beaches they went about their task of unloading and dispatching their equipment calmly and efficiently, and by the time the construction work on the first air landing strip had begun their anti-aircraft guns were in position to ward off enemy air attack. One squadron landed in eight feet of water, and the lorries carrying their anti-aircraft guns were submerged. Although their guns were 12 hours in the water they were all in action against enemy aircraft by nightfall.

For many hours during those first few vital days the men of the Regiment worked under constant shell fire, but they had their reward when their guns shot down the first German aircraft to be destroyed from the ground in Normandy. They have added many more to their "bag" since then. Today the R.A.F. Regiment in France are moving forward with the great Allied Armies and are looking forward to the time when they will take their guns across the Rhine to mount guard on the airfields of the Reich.



Major-General SIR CLAUDE LIARDET, C.B., D.S.O., Commandant of the R.A.F. Regiment and Director General of Ground Defence since February 1942. In this page some of his Regiment's exploits in France and other theatres of war are related. Photo, British Official

the Regiment was built up to considerable strength; and shortly before the British attack at El Alamein, Air Vice-Marshal Coningham, commanding the R.A.F. forces, sent for his Defence Officer and outlined the plan for the great offensive. Together they studied the maps, the Air Vice-Marshal pointing out the enemy airfields to be hoped to occupy during the advance.

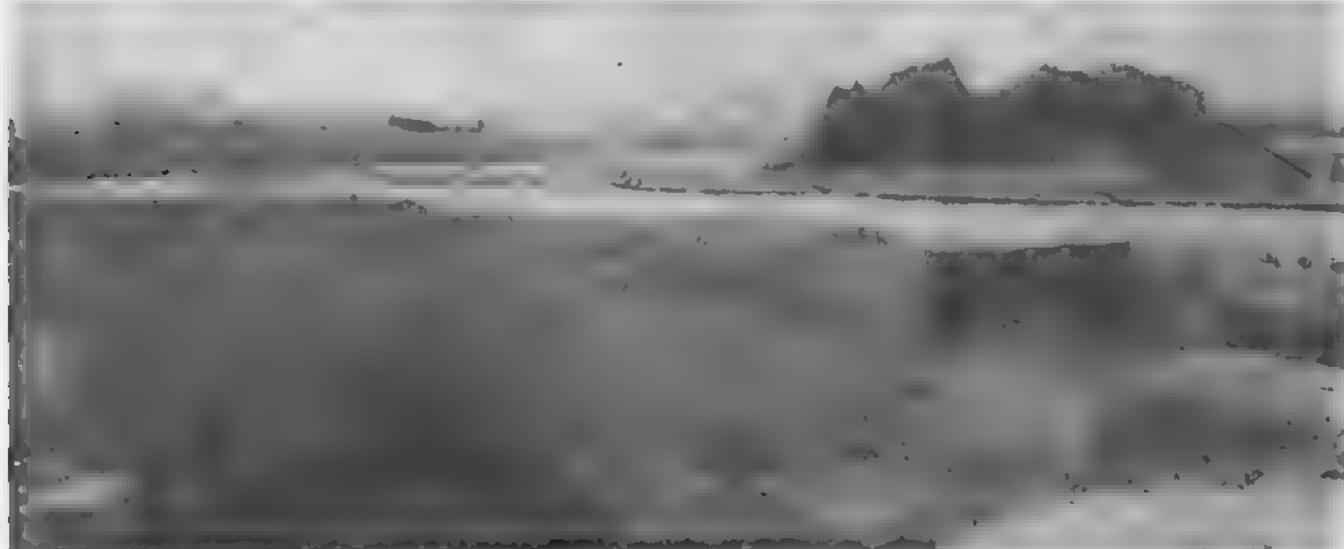
The battles in the Desert from Alamein to Tripoli gave the men of the Regiment their first taste of working in co-operation with the Army in the field and their first chance to get to close grips with the enemy. On the move forward, their anti-aircraft guns helped to give constant protection to convoys, while picked flights went ahead with the infantry (and sometimes without them) to ensure the immediate occupation of enemy airfields. Many times they cleared up pockets of resistance and worked under shell fire and bombing attacks, getting their guns into position.

They cleared mines and unexploded bombs, searched for booby traps and dealt with enemy snipers; in fact, they did everything to get the captured airfields ready for immediate use by their flying comrades. It was their work which enabled the leap-frogging R.A.F. to give the enemy no rest from air

Airmen-Soldiers Deeply Versed in Craft of War



IN EGYPT the R.A.F. Regiment went into action for the first time when it helped to capture Rommel's advanced air bases at Daba and Fuka, on November 4, 1942, and rounded up 200 prisoners; Bren gunners (left) covering advancing riflemen await the order to move up. In the Imphai Valley, Burma, aircraftmen in a trench (right) point out a Japanese position to Sqdn.-Ldr. Ryalls (2nd from right), commanding officer of all R.A.F. regiments in the Valley. The Regiment ordinarily works in very close co-operation with the Army in the field.



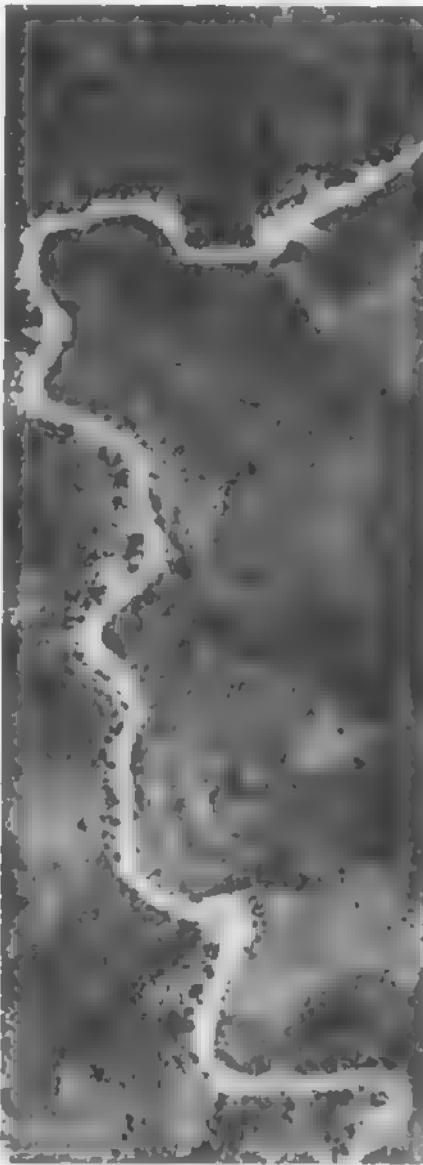
CONCEALMENT PLAYS A BIG PART in attack as well as defence, and here the art of camouflage is strikingly demonstrated during an airfield exercise in Normandy by ten men of the R.A.F. Regiment. Invisible in the lower photograph—prone in the herbage, still as death itself—on the word of command the ten men spring to their feet (opposite) revealing how very effectively they were hidden, with no aid other than that provided by Nature. See also facing page.

They Helped to Drive the Japanese from India



FIGHTING THROUGH DENSE JUNGLE,
swamps and swollen rivers and up rocky mountains, troops of the British 14th Army ousted the last remnants of organized Japanese resistance from India by August 27, 1944, five months after the invasion of the Manipur State. After covering 130 miles of some of the world's roughest routes, our men had succeeded in their immediate objective.

Under the command of Brigadier L. E. C. M. Perowne (1)—leader of "Newcomb's Rifles"—during the fighting in France in June 1940—tough fighters of the 23rd Brigade queued up to receive sorely needed clothing (2). Much of the work of driving the enemy out of Northern India was accomplished by men of the Devon Regiment, some of whom, wounded, are seen about to enter a jeep (3) to be taken to a base hospital. Other wounded cross a temporary wire bridge constructed by Indian engineers (4). The Imphal-Tiddim Road, scene of savage fighting, stretches like a giant snake through the jungle (5); it is now cleared of the enemy.



I WAS THERE! Eye Witness Stories of the War

This Was the End of Our Serfdom in Brussels

After one of the most terrific forward drives of the war—our armoured columns covered 200 miles in six days—the Belgian capital was captured by the British 2nd Army on Sunday, September 3, 1944. A famous Belgian journalist, Louis Quevremont, here describes this dramatic chapter in the city's history. His story is reprinted from the *News Chronicle*.

FOR the past three days I have been of Belgian patriots have been imprisoned and tortured, I saw, on Saturday, this heart-rending scene. A Black Maria was taking away several civilian prisoners. It was followed by a crowd of women shouting out the names of their relatives in the hope that they would hear. Through holes torn in the cloth unknown hands were waving adieu. A youth thrust his head between two warders armed with tommy-guns, but he was thrown back.

I went there and saw them at work, piling up stolen furniture in all kinds of vans and burning heaps of documents. On that same day German girls of the civil and military services—the "mice"—we called them because of their grey uniforms—were ordered to leave within 24 hours. You should have seen them dejectedly waiting for machine-guns riddled, wood-gas operated lorries. They were no longer the laughing, haughty girls whose bottle and necking parties had for long months shocked the people of a hungry capital.

This is where the Brussels White Brigade struck. About 100 "mice" were ordered to heap their luggage at an hotel where it would be picked up by a special van. The van came, but it was a White Brigade one, and into it the "mice," smiling with relief, piled their belongings. Fifteen minutes later the real van arrived.

At the Barrière de St. Gilles, 100 yards from the grim-looking prison where thousands

were, not a cigarette was offered to the routed Germans. Then a long column of brand new amphibious tanks came along and stopped. The crews huddled themselves on the pavements or on the mudguards and fell into a heavy sleep. Not even an air-raid alarm moved them.

During the night of Sunday the White Brigade

went into action at several places. At Molenbeek several garages filled with lorries were blown up. The noise of explosions and of gunfire, and the news that our Allies had entered Tournai, kept everybody awake. Everywhere could be seen groups of Germans selling what they could—lorry tires, bottles of rum, margarine, bicycles. All the Germans were anxious to get civilian clothes.

Some days ago Belgian journalists who had not been working for the German Press and barristers and officers of the Belgian Army received a threatening letter from the Rexist Party in which they were told that they would be shot should a Rexist member in their street be shot. I disappeared for some nights!

Rexist were executed, but there were few reprisals; the Rexist Party had already disbanded, forsaken by its former protectors. At the Gare du Nord Rexist families and legionnaires waited for three days in the hope of getting a train for Germany. Their hopes were in vain. The Germans dropped them. A German officer, who was also a teacher of English, said to me: "We do not like traitors. We just use them."

On Saturday, Sept. 2, the Brussels newspapers of the German Press appeared for the last time. In an editorial entitled "God save Belgium," the "Nouveau Journal" said that the newspapers would not be published on Monday. It announced an era of revolution and of trouble. A crowd mad with joy welcomed the first British cars on the southern outskirts of Brussels at 7 p.m. on Sunday. Flags of all the United Nations were hung from



GESTAPO RECORDS were consumed in the blaze when the retreating enemy fired the magnificent Palais de Justice in Brussels (above). Situated on a height in the centre of the city, the huge building commanded much of Belgium's capital, and it was here that the Gestapo kept its archives. British armoured forces advanced 200 miles in six days, and by this lightning-like drive prevented the Germans from removing their documents. See story above, and *Life*, pp. 293, 298.

I Was There!

balconies and windows. Near the Avenue Louise, the Rue de Livourne and the Rue de Florence, German soldiers were shooting at passers-by. Two German cars stood in the deserted Avenue Louise.

I cycled towards the Place Ste Croix, where stands the huge building of Brussels Radio. The quipping announcers and the staff had gone. The Belgian flag was flying mast-high above the building, now occupied by gendarmes. The gendarmes had been ordered to defend the premises against all attacks. It was dark when I went back, and I ran into violent firing at the Porte de Namur, which armoured cars had reached about 9 p.m. Shots were exchanged with isolated snipers.

The scene all along the Chaussee de Charleroi to Uccle was splendid. People danced and sang in the light of fireworks; members of the Independence Front, armed with rifles, pistols and grenades, were wildly cheered in the Avenue Brugman two

American tanks were surrounded by a crowd of hysterical people. A Brussels fire brigade engine swung past and the firemen announced that German cars were coming in this direction. The crews of the tanks took up battle position, but a dozen people who were sitting on top of the tanks refused to jump down. An American soldier fired a pistol in the air to make them do so. But it was a false alarm.

Before leaving Brussels the Germans destroyed the great copper dome of the Law Courts and set fire to a wing which had been occupied by the military court. The Burgo-master of Brussels, Mr. Van de Meubroek, was back at the Hotel de Ville on Monday morning, where he received British officers. This morning Brussels is full of British and American armoured cars and tanks. The first London soldier with whom I shook hands was Driver J. Heatley, of Pownell Road, Hackney.

They either huddled beneath them or ran blindly for the fine cover of the hedges. They ran in the direction of the fire, shouting that they had surrendered. They gave up in hundreds upon hundreds. There was no fight left in them any more, and now here you can see what is left by the battle in the warm midday sunlight. It is exactly like one of those crowded battle paintings of Waterloo or Borodino except, of course, the kind of wreckage is different.

EVERY staff car—and I suppose I have seen a hundred—is packed with French loot and German equipment. There is a profusion of everything—feld-glasses and typewriters, pistols and small arms by the hundred, cases of wine, truckloads of food and medical stores, a vast mass of leather harness. Every car is full of clothing, and every officer seems to have possessed a pair of corsets to take home. If you want a car you walk up and take your pick—anything from a baby tourer or a volkswagen to a ten-ton half-track. The Tommies start them up and go off through the orchards. Two Russians in German uniform stand stupidly on the river bank, and they timidly hold out cigarettes to anyone who comes by. They stand in the middle of piled-up riches they never dreamed of before—purses crammed with notes that have fallen from dead men's bodies, radio sets and dumps of clothing looted from the French.

At St. Lambert I Saw the End of German Might

The obliteration of the German 7th Army in France was a grim and ghastly feat. Writing from the village of St. Lambert on August 22, 1944, Alan Moorehead, of The Daily Express, describes what happened to the panzers when at last they met our troops head-on.

THE best of Von Kluge's Army came here en masse forty-eight hours ago. They converged upon the village to fight their way out, long caravans of horses and gun-carts, tanks and half-tracks, hospitals and workshops, artillery and infantry. It was the sort of panzer battle array that the Germans have used to terrorize Europe for four years. We knew no combination to stand against it. And now here in the apple orchards and in the village streets one turns sick to see what has happened to the panzers. They met the British and the Allied troops head-on, and they were just obliterated.

UNTIL now I had no conception of what trained artillerymen and infantry can do, and certainly this is the most awful sight that has come my way since the war began. It begins in the back streets of St. Lambert, where the German columns first came in range of the British fire. The horses stampeded. Not half a dozen, but perhaps 300 or more. They lashed down the fences and the hedges with their hoofs and dragged their carriages through the farmyards. Many galloped to the bank of the River Dives and plunged headlong with all their trappings down the 12-foot bank into the stream below, which at once turned red with blood.

Those animals that did not drown under the dragging weight of their harness or die in falling kept plunging about among the broken gun-carriages and trampled to death the Germans fuming under the bank. The drivers of the lorries panicked in the same way. As more and more shells kept ripping through the apple trees they collided their vehicles one against the other and with such force that some of the lighter cars were telescoped with their occupants inside. At some places for stretches of 50 yards, vehicles, horses and men became jammed together in one struggling, shrieking mass. Engines and broken petrol tanks took fire and the wounded pinned in the wreckage were asphyxiated, burned and lost. Those who were lucky enough to get out of the first collisions scrambled up the ditches and ran for cover across the open fields. They were picked off as they ran. One belt of shellfire fell on the Dives River bridge at the moment when two packed columns were converging upon it.

Those vehicles and beasts and men on the centre of the bridge were all pitchforked into space at once. But so many fell that soon the wreckage piled up level with the bridge itself and made a dam across the river. At the far entrance to the bridge, where a number of heavy guns were attempting a crossing, a blockage was caused and took fire. Those in front apparently tried to struggle back. Those behind, being utterly bewildered, tried

to push on. And so the whole column was wedged immovably until it was in flames.

I suppose there were about 1,000 German vehicles of every sort lying out in the fields behind. All these came under fire. The Germans made no attempt to man their guns.



TOKENS OF DEFEAT. German helmets by the hundred marked the scene of large-scale surrenders on the Falaise road, as observed by this British soldier and told in the accompanying story of the rest of a German army on one of this war's grimmest battlefields.

PAGE 314 Photo, New York Times Photo

Too Weak to Cry any More

I have just picked my way across the wreckage to the house on the far side of the orchard. It is full of Germans. Germans beaten and numbed into senselessness. Like animals, they seem to have no will of their own. They are all armed with machine-pistols and rifles, but no one takes the slightest notice of them. It would be absurd to think that they would fire, and nobody has any time to take their arms from them and lead them into captivity.

Over at the hospital it is far worse. The dead and the wounded lie together. Living or dead, there is not much difference in the appearance of the men. Many hours ago life ceased to count for anything at all. The wounded keep dying, but quietly so that one is not aware at any given moment of just how many are surviving. They are all jumbled on top of one another and the stench makes it difficult for one to refrain from being sick.

Outside, a Canadian soldier is mercifully going round shooting wounded horses with a Luger pistol. It would be equally merciful if he did the same for some of these enemy patients who are beyond hope and too weak to cry any more. At any rate I have just directed this mercy killer down to the river where there are about 30 horses wounded and unable to get up the steep banks. Long ago they stopped trying and they stand patiently in the water waiting unconsciously to die.

Germans Flung Helmets Away

I do not know the limits of this battlefield, since I have been here only four hours. It stretches, I know, for about a mile up the Falaise road, because for a good part of that distance you see the line of many hundreds of German helmets flung away by the enemy at the moment of their surrender. I have just selected a volkswagen to get me back to my billet. The back seat is piled up with the belongings of the man who now lies dead by the front wheels. He had taken the precaution, I note, of procuring a civilian suit, which is always a good thing for you if you are going to desert.

WELL, there could be no reason in this ghastly scene. I think I see the end of Germany here. This was their best in weapons and men, their strongest barrier before the Rhine. It has been brushed aside and shattered into bits. The beaten Wehrmacht is a pitiful thing.

I Was There! Our Kill-or-Capture Raid on Thira Island

The enemy-occupied Greek island of Thira was the recent objective of a raiding party, as described here by Sgt. Instructor D. B. Henderson of Perthshire. He tells how the German radio station was destroyed, the barracks shot up and severe casualties inflicted on the surprised garrison.

We landed on the coast of the island during the night, and after marching inland for a short distance got under cover before dawn broke. There were two patrols, each under an officer, and a lieutenant of the Greek Army as interpreter.

The main party was to attack the barracks, in which we had been told there were 38 Italians and 10 Germans, while a smaller party was to blow out the radio station and clean up an outpost at the village of Merigigli. It was a pitch black night, with the faintest crescent of a new moon showing in the sky as we left our hideout for the attack. My instructions were to get a good position covering the small house in which the German officer and his corporal lived, and kill or capture them when they came out to see what the main attack was all about.

Owing to the high walls around the house and the fact that I was single-handed, I found that I could not get a site where I could cover both the back and the front. I got in position behind the wall where I could cover the front door—because that was the nearest to where the main party would attack.

When it came to within a few minutes of zero hour, I began to feel a bit tense and hoped that I could make a clean job of it quickly; but when the attack did start the German officer stubbornly refused to do a thing, although he must have heard the racket. There was quite a wind blowing, but no one could have slept through the sound of the grenades exploding and the burst of rifle fire going on.

It was at this point that I decided to lob a grenade through the front window and then

them up. After the second one I heard people moving inside, but they went towards the rear. I dashed round to the back, but could only hear footsteps hurriedly retreating down the narrow lane. Since it was too dark to shoot, I threw another grenade and then followed down the lane, but saw nothing. Next morning we learned that one of my grenades had probably killed the corporal, but unfortunately the commandant seemed to have got away unhurt.

Meanwhile, the small patrol had everything go perfectly for them. They surprised a German in bed in the first house they entered, and made him show them where the corporal, also caught in bed, was sleeping. After this they bagged six more sleeping Germans and then went to the radio station, which was unguarded, and blew it up, returning in safety to the main body . . .

Meanwhile, the main party had a brisk engagement with the enemy in their billet in the Bank of Athens building, some few minutes of confused hand-to-hand fighting in the pitch dark, and the Greek interpreter was killed and a sergeant mortally wounded. At least three Germans were killed and two wounded, while nine of the Italian Fascists were killed and the same number wounded. As original reports had over-estimated the number of the garrison, it was thought that practically all had been killed, wounded or made prisoners.

We withdrew to our hideout in the hills, then went farther back as we were being hunted from the air. Four Junkers 88s, two seaplanes and a fighter circled over us at a height of under 300 feet but fortunately they did not locate our hiding-place and we left the island in safety that night.



Sgt. Instructor D. B. HENDERSON, who took part in the Thira operation which he describes in this page, is here seen with his Tommy gun. The map shows the location of Thira, one of the Greek Cyclades Islands.

Photo, British Official



OUR DIARY OF THE WAR

AUGUST 30, Wednesday 1,824th day
Western Front—Sea was reached by British troops and R.A.F. by Americans. Canadians entered Rouen.

Air—U.S. bombers attacked targets in Bremen and Kiel, a day following night attack on Stettin and Königsberg by R.A.F.

Russian Front.—Romanian centre of Ploesti captured by Red Army.

Pacific.—Allied naval and air forces began four-day attack on Bonin and Volcano Is.

AUGUST 31, Thursday 1,825th day
Western Front.—British forces reached Amiens and established bridge-head over Somme. Gen. Eberbach, commander of German 7th Army, captured. U.S. troops crossed the Meuse near Sedan.

Russian Front.—Soviet troops entered Bucharest, Rumanian capital.

September 1, Friday 1,826th day
Western Front.—Canadians entered Dieppe without fighting. British reached Arras. Americans occupied Verdun.

Russian Front.—Danubian port of Giurgiu captured by Soviet troops.

Balkans.—Attack on German communications in Yugoslavia launched by Yugoslav Liberation Army in conjunction with Allied air forces.

Pacific.—Liberators made heavy attack on airfields at Davao, Philippines.

General.—General Montgomery promoted Field-Marshal.

September 2, Saturday 1,827th day
Western Front.—51st Division captured St Valery, Lens, Mons and Douai also captured.

Italy.—Announced that 8th Army had broken through Gothic Line. 5th Army captured Pisa.

Russian Front.—Red Army reached Bulgarian frontier between Danube and Black Sea.

Pacific.—Heaviest yet Allied air attack on Davao, Philippines. Matanikera in the Celebes also bombed.

General.—Announced that British Govt. was prepared to negotiate peace with Russia.

September 3, Sunday 1,828th day
Western Front.—Ally troops entered Bremen and liberated Bremen. Abbaye Capt. ed. in southern France. U.S. and French troops entered Lyon.

Air.—R.A.F. heavily attacked airfields in Holland. U.S. bombers attacked Ludwigshafen area of W. Germany.

Pacific.—Allied naval and air forces attacked Wake Island.

September 4, Monday 1,829th day
Western Front.—Antwerp, Louvain and Lille occupied by Allied troops.

Russian Front.—Soviet troops, in co-operation with Romanians, captured Brasov and Sinaia.

General.—"Cease fire" sounded on Russo-Finnish front.

September 5, Tuesday 1,830th day
Western Front.—Allied troops captured Namur and Charleroi.

Air.—U.S. bombers attacked Karlsruhe, Stuttgart and Ludwigshafen. R.A.F. bombed Marseilles and Brest.

Russian Front.—Soviet troops occupied Piteshti (Romania) and Wyszkow, 30 miles N.E. of Warsaw.

Sea.—Announced that carrier-borne aircraft had made repeated attacks on

September 6, Wednesday 1,831st day
Western Front.—Cavalry and Artillery cleared of the enemy.

Air.—R.A.F. bombers heavily attacked Emden. Bremen again bombed.

Russian Front.—Soviet troops captured Turnu-Severin, reaching Rumanian-Yugoslav frontier. Ostrolenka, on Narow approaches to E. Prussia also taken.

General.—Bulgarian Govt. signed Russo-Soviet armistice.

September 7, Thursday 1,832nd day
Western Front.—British forces crossed Albert Canal and reached Bourg-Leopold. Ypres captured. U.S. 3rd Army made two crossings of the Moselle.

Horne Front.—Announced that 8,000 flying bombs launched in 80-day attack some 2,300 reached London area.

September 8, Friday 1,833rd day
Western Front.—Canadians occupied Ostend unopposed. U.S. troops captured Liege. In southern France Allies

September 9, Saturday 1,834th day
Western Front.—U.S. 1st Army crossed Luxembourg-German frontier north of Trier. French captured Dijon.

Air.—More than 1,000 U.S. bombers attacked oil plants from Leipzig to Hanover; 175 German fighters destroyed R.A.F. bombers.

Pacific.—Units of U.S. Pacific Fleet bombarded Palau Islands. Carrier-aircraft attacked central Philippine Islands.

September 10, Sunday 1,835th day
Western Front.—Full-scale attack opened against Le Havre. U.S. troops entered city of Luxembourg. Ghent finally cleared of the enemy. Canadians entered Zeebrugge.

Air.—Over 1,000 U.S. bombers attacked tank and aircraft factories in southern Germany.

Pacific.—Carrier-aircraft attacked Truk also bombed.

General.—Mr. Churchill arrived in Canada for conference with Roosevelt.

September 11, Monday 1,836th day
Western Front.—U.S. 1st Army crossed Luxembourg-German frontier north of Trier. French captured Dijon.

Air.—More than 1,000 U.S. bombers attacked oil plants from Leipzig to Hanover; 175 German fighters destroyed R.A.F. bombers.

Pacific.—Units of U.S. Pacific Fleet bombarded Palau Islands. Carrier-aircraft attacked central Philippine Islands.

September 12, Tuesday 1,837th day
Western Front.—U.S. 1st Army made second crossing of German frontier west of Eupen. German garrison at Le Havre surrendered. Fort Eben Emael Bruges and Bourg-Leopold occupied by Allies.

Air.—U.S. and R.A.F. bombers again attacked oil plants and aircraft works in many parts of Germany.

September 13, Wednesday 1,838th day
Western Front.—U.S. 1st Army crossed Luxembourg-German frontier north of Trier. French captured Dijon.

Air.—More than 1,000 U.S. bombers attacked oil plants from Leipzig to Hanover; 175 German fighters destroyed R.A.F. bombers.

Pacific.—Units of U.S. Pacific Fleet bombarded Palau Islands. Carrier-aircraft attacked central Philippine Islands.

September 14, Thursday 1,839th day
Western Front.—U.S. 1st Army crossed Luxembourg-German frontier north of Trier. French captured Dijon.

Air.—More than 1,000 U.S. bombers attacked oil plants from Leipzig to Hanover; 175 German fighters destroyed R.A.F. bombers.

Pacific.—Units of U.S. Pacific Fleet bombarded Palau Islands. Carrier-aircraft attacked central Philippine Islands.

September 15, Friday 1,840th day
Western Front.—U.S. 1st Army crossed Luxembourg-German frontier north of Trier. French captured Dijon.

Air.—More than 1,000 U.S. bombers attacked oil plants from Leipzig to Hanover; 175 German fighters destroyed R.A.F. bombers.

Pacific.—Units of U.S. Pacific Fleet bombarded Palau Islands. Carrier-aircraft attacked central Philippine Islands.

September 16, Saturday 1,841st day
Western Front.—U.S. 1st Army crossed Luxembourg-German frontier north of Trier. French captured Dijon.

Air.—More than 1,000 U.S. bombers attacked oil plants from Leipzig to Hanover; 175 German fighters destroyed R.A.F. bombers.

Pacific.—Units of U.S. Pacific Fleet bombarded Palau Islands. Carrier-aircraft attacked central Philippine Islands.

September 17, Sunday 1,842nd day
Western Front.—U.S. 1st Army crossed Luxembourg-German frontier north of Trier. French captured Dijon.

Air.—More than 1,000 U.S. bombers attacked oil plants from Leipzig to Hanover; 175 German fighters destroyed R.A.F. bombers.

Pacific.—Units of U.S. Pacific Fleet bombarded Palau Islands. Carrier-aircraft attacked central Philippine Islands.

September 18, Monday 1,843rd day
Western Front.—U.S. 1st Army crossed Luxembourg-German frontier north of Trier. French captured Dijon.

Air.—More than 1,000 U.S. bombers attacked oil plants from Leipzig to Hanover; 175 German fighters destroyed R.A.F. bombers.

Pacific.—Units of U.S. Pacific Fleet bombarded Palau Islands. Carrier-aircraft attacked central Philippine Islands.

September 19, Tuesday 1,844th day
Western Front.—U.S. 1st Army crossed Luxembourg-German frontier north of Trier. French captured Dijon.

Air.—More than 1,000 U.S. bombers attacked oil plants from Leipzig to Hanover; 175 German fighters destroyed R.A.F. bombers.

Pacific.—Units of U.S. Pacific Fleet bombarded Palau Islands. Carrier-aircraft attacked central Philippine Islands.

September 20, Wednesday 1,845th day
Western Front.—U.S. 1st Army crossed Luxembourg-German frontier north of Trier. French captured Dijon.

Air.—More than 1,000 U.S. bombers attacked oil plants from Leipzig to Hanover; 175 German fighters destroyed R.A.F. bombers.

Pacific.—Units of U.S. Pacific Fleet bombarded Palau Islands. Carrier-aircraft attacked central Philippine Islands.

September 21, Thursday 1,846th day
Western Front.—U.S. 1st Army crossed Luxembourg-German frontier north of Trier. French captured Dijon.

Air.—More than 1,000 U.S. bombers attacked oil plants from Leipzig to Hanover; 175 German fighters destroyed R.A.F. bombers.

Pacific.—Units of U.S. Pacific Fleet bombarded Palau Islands. Carrier-aircraft attacked central Philippine Islands.

September 22, Friday 1,847th day
Western Front.—U.S. 1st Army crossed Luxembourg-German frontier north of Trier. French captured Dijon.

Air.—More than 1,000 U.S. bombers attacked oil plants from Leipzig to Hanover; 175 German fighters destroyed R.A.F. bombers.

Pacific.—Units of U.S. Pacific Fleet bombarded Palau Islands. Carrier-aircraft attacked central Philippine Islands.

September 23, Saturday 1,848th day
Western Front.—U.S. 1st Army crossed Luxembourg-German frontier north of Trier. French captured Dijon.

Air.—More than 1,000 U.S. bombers attacked oil plants from Leipzig to Hanover; 175 German fighters destroyed R.A.F. bombers.

Pacific.—Units of U.S. Pacific Fleet bombarded Palau Islands. Carrier-aircraft attacked central Philippine Islands.

September 24, Sunday 1,849th day
Western Front.—U.S. 1st Army crossed Luxembourg-German frontier north of Trier. French captured Dijon.

Air.—More than 1,000 U.S. bombers attacked oil plants from Leipzig to Hanover; 175 German fighters destroyed R.A.F. bombers.

Pacific.—Units of U.S. Pacific Fleet bombarded Palau Islands. Carrier-aircraft attacked central Philippine Islands.

September 25, Monday 1,850th day
Western Front.—U.S. 1st Army crossed Luxembourg-German frontier north of Trier. French captured Dijon.

Air.—More than 1,000 U.S. bombers attacked oil plants from Leipzig to Hanover; 175 German fighters destroyed R.A.F. bombers.

Pacific.—Units of U.S. Pacific Fleet bombarded Palau Islands. Carrier-aircraft attacked central Philippine Islands.

September 26, Tuesday 1,851st day
Western Front.—U.S. 1st Army crossed Luxembourg-German frontier north of Trier. French captured Dijon.

Air.—More than 1,000 U.S. bombers attacked oil plants from Leipzig to Hanover; 175 German fighters destroyed R.A.F. bombers.

Pacific.—Units of U.S. Pacific Fleet bombarded Palau Islands. Carrier-aircraft attacked central Philippine Islands.

September 27, Wednesday 1,852nd day
Western Front.—U.S. 1st Army crossed Luxembourg-German frontier north of Trier. French captured Dijon.

Air.—More than 1,000 U.S. bombers attacked oil plants from Leipzig to Hanover; 175 German fighters destroyed R.A.F. bombers.

Pacific.—Units of U.S. Pacific Fleet bombarded Palau Islands. Carrier-aircraft attacked central Philippine Islands.

September 28, Thursday 1,853rd day
Western Front.—U.S. 1st Army crossed Luxembourg-German frontier north of Trier. French captured Dijon.

Air.—More than 1,000 U.S. bombers attacked oil plants from Leipzig to Hanover; 175 German fighters destroyed R.A.F. bombers.

Pacific.—Units of U.S. Pacific Fleet bombarded Palau Islands. Carrier-aircraft attacked central Philippine Islands.

September 29, Friday 1,854th day
Western Front.—U.S. 1st Army crossed Luxembourg-German frontier north of Trier. French captured Dijon.

Air.—More than 1,000 U.S. bombers attacked oil plants from Leipzig to Hanover; 175 German fighters destroyed R.A.F. bombers.

Pacific.—Units of U.S. Pacific Fleet bombarded Palau Islands. Carrier-aircraft attacked central Philippine Islands.

September



SEAFIRE III WITH FOLDED WINGS (left) for compact stowage in aircraft-carrier hangars; folding reduces the wing-span of 36 ft. 8 ins. to nearly one-third. In service with the Fleet Air Arm—it made its first operational appearance on D-Day—it is a naval version of the Spitfire. Latest and fastest Spitfire is the 5-bladed 2,000 h.p. Mark XIV (right); it has operated against flying bombs. Armament consists of three alternative arrangements of 20-mm. cannon and '5 and '303 machine-guns.

Photos, British Official; Charles E. Brown

THE WAR IN THE AIR

by Capt. Norman Macmillan, M.C., A.F.C.

By September 8, 1944, the 2nd Tactical Air Force was operating from air-fields in Belgium, and rocket-firing Typhoons that day attacked barges on the Rhine. The chimes and strokes of Big Ben came direct from Westminster over the radio that evening at nine o'clock, after an indirect transmission beginning on June 16, 1944. The direct emission of this world-famous time signal marked the close of the flying bomb Battle of London, which began on June 13, seven days after the first Allied troops had stormed the Normandy beaches.

It came to an end when the Allied Armies driving through the disorganized German Armies in Northern France had thrust their armour so far forward as to draw a cordon round the Channel coast from which the flying bombs had been launched, thus cutting off the supplies, which, owing to bombing attacks, had been on an expenditure basis, with small stocks kept in the launching area—the crescent-shaped coastal zone from Le Havre to Ostend.

Up to September 4 a total of 8,070 flying bombs was estimated to have been launched against England, and there was a further attack during a short period before daybreak on September 5. It does not necessarily follow that this must be the last attack, for some of the bombs which have entered the area singled out for attack, mainly Greater London, have come from a due easterly direction, launched from aircraft.

DURING the night of September 1/2, two component aircraft laden with explosive landed in England. They did little damage and caused no casualties when they blew up. They were presumed to be the lower components of the composite Messerschmitt 109 and Junkers 88, in which a single pilot seated in the cockpit of the 109 controls both aircraft, and releases the Junkers to fly on towards its intended target. One such German version of our Mayo composite aircraft was shot down into the sea off Normandy.

Just as the tank came into the last war too late for full development, so the flying bomb has come into this European war. It is still in a comparatively crude stage and is capable of much development. Should the world be unable to abolish war, the means has been devised to make air warfare still more terrible.

in the future. The nature of this weapon, employed as a long-range bombardment missile, demands a new regard for geographical considerations when considering the configuration of post-war Europe. German exposure of this weapon is opportune, for its use by the enemy will no doubt cause Allied expert advisers to take into consideration its range of action in relation to important European cities when fixing the future German frontier in the west; and it will probably be necessary to create a deep neutral zone inside Germany's frontiers to ensure that no launching sites are secretly erected in later years against the outbreak of another planned war.

FASTEST Fighters to Catch and Kill the Flying Bombs

The forces that had to be mustered to provide defence against the flying bomb indicate the power of this type of weapon. Eventually there were 800 heavy and 2,000 light guns with 20 American batteries (one-eighth of the heavy guns) concentrated along the south-east coast under Anti-Aircraft Command. Balloon Command had 2,000 balloons, flying two and three cables instead of the normal single cable, thanks to the lift obtainable through the lower height at which the balloons had to fly.

The flying bombs came over from below 1,000 feet up to 2,500 feet at a speed of from 350 to 400 miles an hour. Fighters maintained standing patrols of between 30 and 40 aircraft during periods of sharp attack. The aircraft used by A.D.G.B. were the Tempest, Mustang and the Griffon Spitfire, for only the fastest fighters were fast enough to catch the prey. The Spitfire XII is a low-level Griffon-engined aircraft. The latest Spitfire is the Mark XIV, fitted with the Rolls-Royce Griffon 65, developing over 2,000 h.p. for an even weight in lbs. This engine has a two-speed supercharger and a five-blade Rotol constant speed aircrew. Power is maintained up to 40,000 feet.

These three types of fighters destroyed 1,900 flying bombs. The Tempests got 578, one of them, flown by Sqdn. Ldr. Berry, shot down over 60. Spitfire XIVs brought down over 300. Guns destroyed 1,560 and the last line of defence, barrage balloons.

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279. Of the bombs launched, 29 per cent got through to the London area, 25 per cent were erratic or inaccurate (some diving into the sea), and 46 per cent were brought down by the triple defences. Successful defence was due to timely warning by intelligence agents, followed up by air photographic reconnaissance which disclosed the nature of the threat and many of its testing, manufacturing and launching sites and depots, and bombing by British and American aircraft to the vast tune of 100,000 tons of bombs, which destroyed all the original launching sites and delayed the plan for five months.

The value of the information and action taken before the flying bomb attack is shown by the fact that 23,000 houses were destroyed or damaged beyond repair, while 870,000 houses (some seriously damaged) need repair. That was done in less than three months by a depleted force of flying bombs whose maximum assault rate was 200 in one day, and whose average rate was about 100 a day. Had the enemy's intention not been discovered the assault might well have been four times as heavy and lasted many months longer. To prevent that, 2,900 pilots and other members of aircrews gave their lives during the great bombardment of the flying bomb bases, many of which were outside the action limits of the fastest fighters. These men deserve to be remembered with the 375 fighter pilots killed and 358 wounded in the first Battle of Britain in 1940.

DEFENCE improved from the beginning of the attack to the end. In the beginning 33 per cent of the bombs were brought down and a greater number got through to the London area. In the end 70 per cent were brought down and 9 per cent reached London. On August 28 only four got to London and 97 were brought down.

But aviation has demonstrated its merciful side simultaneously with the other. Thousands of wounded have been evacuated from France by air, mostly in Dakotas carrying 18 stretcher or 24 walking cases. Death rate has dropped from 16 per 1,000 by sea to one per 1,000 by air. This has been due mainly to speed and smoothness of travel to skilled hospitals; the deaths have mostly occurred after some time in the United Kingdom.

Meanwhile, Hitler Europe is getting more heavily bombed—the Opel works at Russelheim on August 12 and 25, Königsberg on August 26 and 29, the Ruhr on August 27, Stettin port and canal on August 16 and 29; the port of Kiel was attacked by British and U.S. bombers on July 18, 23, August 4, 6 and 16, and Emden on September 6.

Quick Bases for Spitfires in Southern France



EMERGENCY LANDING STRIPS speedily established by the R.A.F. in Southern France enabled overwhelming air cover to be given to Allied forces pushing on into the interior. From such sites as this (1) roots, rocks, stones, and other obstacles were grubbed up to secure a level base; on the completed strip (2) Spitfires are at their dispersal points. R.A.F. men, making short work of airborne supplies, unload a long-range fuel tank from a Dakota transport plane (3). See also p. 319.

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Photos, British Official

How Paris was Relieved from Peril of Famine



MR. CHURCHILL'S PROMISE OF FOOD for the French capital, as soon as it should be liberated, was promptly kept. British and Canadian Army lorries delivered first consignments of the thousands of tons of sorely needed provisions on August 28, 1944. Vehicles (above, and below) displayed heartening words.



IN SOUTHERN FRANCE distribution centres for supplies captured by the advancing Allies from the Germans were set up. Above, citizens of Besançon gather around to draw their free rations. Men of the Maquis are seen standing by.



SHOPS HAD BEEN PLUNDERED by the Germans and shelves of the Paris stores laid bare. But against such emergency as this vast food stocks had been piled in the United Kingdom: from those stocks supplies had been arriving in Normandy since D-Day, to be held in the Civil Affairs depots until required. Unloading sacks of flour from a lorry in a Paris square (above), our men laboured and joked amidst an extremely appreciative assembly of onlookers.

Editor's Postscript

WIDELY spread I find the delusion that "if we get rid of Hitler, the German people will be all right." This is the veriest nonsense. To attribute the conceit and brutality of Germans to Nazi teaching shows complete ignorance of what they were before Hitler was born. They have been taught for the best part of a century that they were destined by Providence ("their old German god," as the late Kaiser called him) to be a "master-race" and rule the world. They were especially encouraged to look forward to a day when they would establish themselves in Britain, which they believed to be decadent, anaemic, and too frivolous to defend itself successfully. No English writer knew the Germans better than the author of *Elizabeth and Her German Garden* and so many more books of delicious humour and sentiment and close observation. In most of these she shrewdly criticized them, and in *The Caravanners*, written thirty-five years ago, she drew an unforgettable portrait of a Prussian officer, one of the Pomeranian "vons," who let himself go on the subject of his country's future. The Germans, he firmly believed, had "a right to regard themselves as specially raised by Almighty God to occupy the first place among the nations."

JOURNEYING through the south of England, he noted with satisfaction that it looked rich, "as if there were money in it." His thought when he caught sight of the village churches and snug parsonages was that "some day perhaps—and who knows how soon?—we shall have a decent Lutheran pastor in his black gown preaching in every one of those churches." He decided that everything English was unmethodical, happy-go-lucky, effeminate, and non-military. The food was "uneatable" (though, being a greedy person with a huge appetite, he ate plenty of it). The inhabitants were "asses." When he went to church, he disliked the frequent change of positions, standing, sitting, kneeling; and he considered this "one of the keys to the manifest decadence of the British character." It was highly irreverent; and, though he deplored irreverence, he could not altogether regret it, since it would undoubtedly land the British nation all the sooner "in the jaws of Germany." And "How good it will taste!" he reflected longingly. That was not exaggerated. I knew many Germans who held similar views and did not conceal them. In the north they were almost all of that kidney. I am sure that nothing could be more misguided than to suppose that Hitler and his fellow-criminals are responsible for the idiotic pride which has led the Germans so disastrously astray.

How are they to be cured of it? How are the children who are taught all the nonsense about the glory of the Third Reich and their own superiority to other nations to be given back sanity and induced to prefer decent behaviour? That problem is forced on the notice of theatre-goers by the play from the United States which has started a run in London with every prospect of long success. The play is called *Tomorrow the World*. The words are a quotation from the German song which ends with the boast that tomorrow the Germans will conquer the whole world. The principal character is a boy of twelve. He is the son of a German who won a Nobel Peace Prize and was murdered by the Nazis. He has been told that his father was a traitor and a coward who committed suicide. He speaks of Jews in foul terms. He recites what he has learned of Nazi doctrine with ludicrous enthusiasm. His mother was American and

his uncle, a young college professor, manages to get the boy out of Germany and into the United States. He causes dismay, of course, insists on wearing his Nazi uniform and hailing Hitler; begins spying on his uncle, who is engaged on important war work; and makes a murderous attack on a little girl who has discovered what he is doing and will not promise to keep quiet about it.

The uncle is at his wits' end. In a fit of ungovernable rage he almost throttles his nephew, who is saved by the girl he is going to marry, a Jewess, who has been called filthy names by the young devil. She feels pity for him instead of anger, and it is she who persuades the professor not to hand him over to the police. She thinks that he can be reformed because tears come into his eyes when he hears that the little girl had, just before she was attacked, bought a present for him. Through all his punishments he had never cried. Now, the fiancée fancies, he can be approached by means of his desire for affection. So he stays in the professor's house.

It is an interesting play, very good "theatre," acted brilliantly. But I cannot pretend it offers convincing proof, or even hope that this little Nazi reptile would ever be turned by kindness into a decent human being. The Jesuits say "Let us have a child up to the age of seven, and he will never break away from what we have taught him." I do not think that is of universal application. I know of some cases in which there has been

a breakaway. But generally speaking it holds good. How are German boys and girls into whose heads and natures Nazi lies and bestialities have been driven from their earliest years to be converted into civilized beings?

THE more we learn about previous civilizations the more we find they resembled our own. The Cretans had domestic plumbing arrangements like ours (though we do not know whether they made jokes about plumbers as we do). The Romans had central heating, and so on. Now it is suggested by a learned Mexican who has studied the ancient Mayan civilization, which flourished in his country, that the Mayas knew all about penicillin many hundreds of years ago! They cured infection with mould growing on damp wood or food made from certain plants, and penicillin, it appears, is just that. (See p. 190 for facts and figures concerning penicillin—"one of the most powerful weapons in mankind's armoury against disease.") They also had herb remedies for many other diseases, including tuberculosis and leprosy. When the Spanish invaders of South and Central America brutally destroyed the systems of civilized life that they found there, the secrets of these cures were lost. Now one has been rediscovered (this is the theory put forward), and it is possible others might be. Let us hope so, anyway.

MORE of us eat sweets now than ever before, I suppose. The scarcity of alcohol—you can hardly call beer alcoholic these days, though it may taste quite good and prove an agreeable thirst-quencher—creates among those who were accustomed to sherrries or cocktails before lunch, and port after dinner, and whiskies-and-sodas before going to bed, a craving for something to take its place. That craving can be supplied, in part at any rate by sweets. Even persons who are not affected in that way regularly purchase their ration of chocolate or boiled sweets, for the reason that they feel they would be missing something if they did not. At a bridge evening I went to last week there were dishes of candies, as the Americans call them, on a side-table, as well as boxes of cigarettes, and I noticed that nearly all the guests ate some. For children they are really a necessity, most doctors will tell you; but that must depend on the kind of food the little ones have. However, unless candies are eaten in large quantities, which is scarcely possible just now, they don't do any harm to anyone . . . except to the diabetics!

BICYCLING was never more in favour than it is today, in spite of the difficulty in buying machines. I have never seen larger flocks of cyclists than those which now sweep over many of our roads when work ends for the day—and I suppose also when it begins, though I don't see that; not even in The Hague or Copenhagen, where there always seemed to me to be more people on wheels than on foot. When first the low bicycle, the Safety, came into use it was ridden for the most part by people who took up cycling simply as an amusement. We used to ride in Battersea Park and sometimes have breakfast in the refreshment kiosk which stood in that very delightful "lung" of south-west London. It was quite the fashionable thing to do. That paved the way for the taking-up of the bicycle by the million as a means of getting to and from work and out into the country at week-ends. This gradually went out of favour until a few years ago. Now if you want a really good machine you have to pay a high price. I heard of one going for as much as £30 the other day. But there are, of course, much cheaper articles to be had, and sometimes a deal can be made by way of barter. An advertisement in a London paper offered three bottles of gin in exchange for one, which would be the equivalent of about £4.



General JACQUES PHILIPPE LECLERC, commander of the 2nd French Armoured Division which entered Paris on August 24, 1944. The division consisted of Frenchmen who had fought in Africa and later were equipped and trained in England. Photo, Planet News

Our Tanks Chased the Nazis out of Lisieux



BRITISH ARMOUR CLIMBED THE HILL past the famous basilica of St. Therese (above) after the enemy had been routed out of Lisieux in Northern France. The Germans had strong positions dominating the eastern end of the town, but by August 24, 1944, they had been overwhelmed. Then, by-passing Le Havre and Dieppe and outflanking the B-17-bomber sites between these towns, the Allied thrust across the Seine and the Somme developed on a spectacular scale.

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